LELAND STANFORD JUNIOR UNIVERSITY

REGISTER FOR 1928-1929

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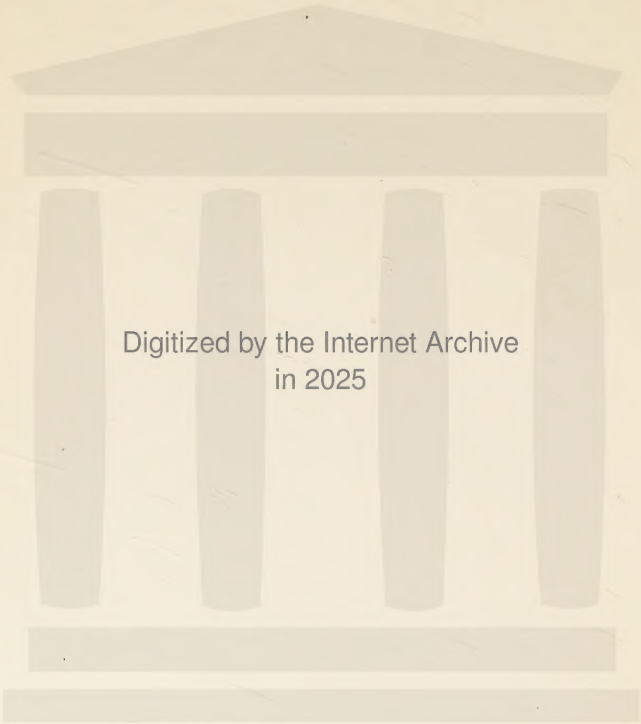
AND NATURAL SCIENCES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STANFORD UNIVERSITY BULLETIN

THIRTY-EIGHTH

ANNUAL REGISTER

1928-29

"The beneficence of the Creator toward man on earth, and the possibilities of humanity are one and the same."—LELAND STANFORD.

"A generous education is the birthright of every man and woman in America."

—DAVID STARR JORDAN.

STANFORD UNIVERSITY, CALIFORNIA
PUBLISHED BY THE UNIVERSITY

STANFORD
UNIVERSITY
PRESS

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OFFICE DIRECTORY

[The rooms in the Inner Quadrangle are numbered consecutively, beginning at the left of the main entrance, ten numbers being allotted to each building. In the Outer Quadrangle forty numbers are allotted to each of the larger buildings and ten numbers to each one-story building, beginning with the Assembly Hall (number 120). The Administration Building is on the north façade of the Outer Quadrangle. The Engineering Buildings south of the Quadrangles begin with number 500. The Library is the central building in the second Quadrangle group. The Chemistry Building is on the west avenue between the Quadrangles and the Museum. Anatomy and Bacteriology are in the old Museum building.]

Administration Building:

PRESIDENT, Room 165.

COMPTROLLER, Room 162.

REGISTRAR, Room 164.

DEAN OF MEN, Room 161.

DEAN OF WOMEN, Room 163*a*.

ACADEMIC SECRETARY AND ALUMNI SECRETARY, Room 174.

APPOINTMENT SECRETARY, Room 170.

DEAN OF SUMMER QUARTER, Room 173.

LOWER DIVISION COMMITTEE, Room 164.

COMMITTEE ON PUBLIC HEALTH, Room 164.

CITIZENSHIP, Room 172.

The various departmental offices are given in the *Time Schedule* and in the *Directory of Officers and Students.*

The University Postoffice is *Stanford University, California.*

The University Telephone Office is *Palo Alto* (office and departmental telephones "Palo Alto 900" with local numbers added).

The University Railway Station and Telegraph and Express Offices are *Palo Alto, California.*

Requests for *University Bulletins,* blanks, and other printed matter, and inquiries regarding terms of admission, advanced standing, etc., should be addressed to THE REGISTRAR, *Stanford University, California.*

1928

JULY

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1929

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UNIVERSITY CALENDAR

1928

AUTUMN QUARTER

Sept.	17–21	Monday–Friday.....College Entrance Board Examinations.
Sept.	28	Friday.....College Aptitude Test.
Oct.	1	Monday.....Lower Division Registration (new students).
Oct.	2	Tuesday.....Registration for Autumn Quarter
Oct.	3	Wednesday.....Instruction begins.
Oct.	5	Friday.....Conferring of Degrees.
Oct.	7	Sunday.....Matriculation Sunday.
Oct. – Dec.	23 – 20	..... Make-up Examinations.
Nov. – Dec.	29 – 2	Thursday–Sunday.....Thanksgiving Recess.
Dec.	17–20	Monday–Thursday.....End-Quarter Examinations.

1929

WINTER QUARTER

Dec.	31	Monday [1928].....College Aptitude Test.
Jan.	2	Wednesday.....Registration for Winter Quarter.
Jan.	3	Thursday.....Instruction begins.
Jan.	4	Friday.....Conferring of Degrees.
Jan. – Mar.	23 – 22	..... Make-up Examinations.
Feb.	22	Friday.....Washington's Birthday (Holiday).
Mar.	9	Saturday.....Founders' Day.
Mar.	19–22	Tuesday–Friday.....End-Quarter Examinations.

SPRING QUARTER

Mar.	30	Saturday.....College Aptitude Test.
April	1	Monday.....Registration for Spring Quarter.
April	2	Tuesday.....Instruction begins.
April	5	Friday.....Conferring of Degrees.
April – June	22 – 12	..... Make-up Examinations.
June	8–12	Saturday–Wednesday..End-Quarter Examinations.
June	15	Saturday.....Senior Class Day.
June	16	Sunday.....Baccalaureate Sunday.
June	17	Monday.....Commencement.

SUMMER QUARTER

June	18	Tuesday.....College Aptitude Test.
June	17–22	Monday–Saturday.....College Entrance Board Examinations
June	20	Thursday.....Registration for Summer Quarter.
June	21	Friday.....Instruction begins.
July	4	Thursday.....Independence Day (Holiday).
Aug.	2	Friday .....First Term ends.
Aug.	29–31	Thursday–Saturday....End-Quarter Examinations.

ADMINISTRATIVE OFFICERS

BOARD OF TRUSTEES

[The figures in parentheses indicate year of beginning of service]

Wallace McKinney Alexander (1924)...215 Market St., San Francisco
Frank Bartow Anderson (1912)
California and Sansome Sts., San Francisco
Harry Chandler (1923).....*Times* Office, Los Angeles
Leland Whitman Cutler (1920)...Financial Center Bldg., San Francisco
Frank Prentiss Deering (1916)...325 Standard Oil Bldg., San Francisco
Joseph Donohoe Grant (1891).....114 Sansome St., San Francisco
Thomas Tingey Craven Gregory (1919)....Balfour Bldg., San Francisco
Herbert Clark Hoover (1912).....Washington, D.C.
Timothy Hopkins (1885).....111 Sutter St., San Francisco
Ira Shell Lillick (1923).....900 Balfour Bldg., San Francisco
Christian Otto Gerberding Miller (1923)
433 California St., San Francisco
William Mayo Newhall (1912).....260 California St., San Francisco
John Thomas Nourse (1920).....2 State Bldg., San Francisco,
Paul Shoup (1923).....Southern Pacific Bldg., San Francisco
Marcus Cauffman Sloss (1920).....Mills Bldg., San Francisco

OFFICERS OF THE BOARD

President: William Mayo Newhall
Vice-President: Marcus Cauffman Sloss
Secretary-Treasurer: Thomas Tingey Craven Gregory
Assistant Secretary and Assistant Treasurer: Frank Prentiss Deering

STANDING COMMITTEES OF THE BOARD

Finance: Gregory, Anderson, Cutler, Grant, Hopkins, Miller, Newhall, Shoup
University: Lillick, Alexander, Chandler, Deering, Hoover, Newhall, Nourse, Sloss
Rules: Gregory, Nourse, Sloss
Campus: Cutler, Gregory, Hoover, Hopkins

THE STANFORD NATIONAL BOARD

ELMER JEFFERSON BISSELL.....Glendissary Lane, Santa Barbara
BENJAMIN FRANKLIN BLEDSOE.....649 Roosevelt Bldg., Los Angeles
*CHARLES REYNOLDS BROWN....Yale Divinity School, New Haven, Conn.
FLOYD CROMWELL BROWN.....704 Johnstone Ave., Bartlesville, Okla.
ROBERT WILLIS CAMPBELL.....208 S. La Salle St., Chicago, Ill.
NATHANIEL ALLEN CARLE....Public Service Production Co., Newark, N.J.
STRABO VIVIAN CLAGGETT.....1820 Washington St., Auburndale, Mass.
*PERRY ORSON CRAWFORD...California-Oregon Power Co., Medford, Ore.
WILLIAM HENRY CROCKER...Crocker First National Bank, San Francisco
WALTER F. DILLINGHAM.....Honolulu, T.H.
PAUL MILTON DOWNING.....Pacific Gas & Electric Co., San Francisco
MILTON ESBERG.....601 Third St., San Francisco
§FRANK PUTNAM FLINT.....Title Insurance Bldg., Los Angeles
ROBERT N. FRICK.....Box 1708, Stanford University
HENRY ABRAHAM FRYE.....809 Crozer Bldg., Philadelphia, Pa.
WILLIAM HASTINGS HARRELSON.....2610 Filbert St., San Francisco
GEORGE HERBERT HERROLD.....2251 Langford Ave., St. Paul, Minn.
WILLIAM KOERNER.....Magna Copper Co., Superior, Ariz.
FREDERICK RODGERS LANAGAN.....570 Williams St., Denver, Colo.
ABRAHAM LEWIS.....2211 Kamehameha Ave., Honolulu, T.H.
KENNETH MACKINTOSH.....1701 Smith Bldg., Seattle, Wash.
CHARLES MCFERSON MANNON.....Ukiah
GEORGE THOMAS MARYE.....Financial Center Bldg., San Francisco
WILLIAM METCALF PARKIN.....5577 Hampton St., Pittsburgh, Pa.
FRANCIS PRICE.....Box 680, Santa Barbara
HENRY MAURIS ROBINSON.First National Bank of Los Angeles, Los Angeles
CHARLES A. SHURTLEFF.....Menlo Park
HOMER ROBERTS SPENCE.....Hotel Alameda, Alameda
LESTER DOUGLAS SUMMERFIELD.....237 Clay St., Reno, Nev.
CLYDE ARTHUR SWIGART.....Standard Oil Co., Bakersfield
CHARLES COLLINS TEAGUE.....Santa Paula
WILLIAM HENRY THOMAS.....725 Knott St., Portland, Ore.
WILLIAM L. VALENTINE.....1020 Security Bldg., Los Angeles
ARTHUR BENJAMIN WEST.....Edgemont, Riverside

* Resigned.
§ Deceased, February 12, 1929.

EXECUTIVE OFFICERS

[Office and office hours in parentheses; MTWThF unless otherwise specified. "Adm." before office number indicates Administration Bldg.; "a," Anatomy; "b," Bacteriology; "c," Chemistry; "g," Encina Gymnasium; "p," Press.]

President: Ray Lyman Wilbur. (Adm. 165, 10–12, 2–5.)
Comptroller: Almon Edward Roth. (Adm. 162, MWF 10–12, 2–4, S 10–12.)
Registrar: John Pearce Mitchell. (Adm. 164, 8–12, 1–4, S 8–12.)
Dean of Women: Mary Yost. (Adm. 163a, 10–12.)
Dean of Men: George Bliss Culver. (Adm. 161a, 8:30–11:45, 1:30–4.)
Chaplain: David Charles Gardner. (Vestry.)

Academic Secretary: John Ezra McDowell. (Adm. 174.)
Anatomy: Arthur William Meyer. (a2.)
Appointment Secretary: Elizabeth Burritt Snell. (Adm. 170.)
Bacteriology and Experimental Pathology: Edwin William Schultz. (b1.)
Biology, School of: Ernest Gale Martin. (482.)
Botany: George James Peirce. (466.)
Business, Graduate School of: William Eugene Hotchkiss, Dean. (422.)
Chemistry: Robert Eckles Swain. (c10.)
Citizenship: Edgar Eugene Robinson, Director. (Adm. 172.)
Classical Literature: Augustus Taber Murray. (257.)
Economics: Murray Shipley Wildman. (223.)
Education, School of: Ellwood Patterson Cubberley, Dean. (51.)
Engineering, Civil: John Charles Lounsbury Fish. (266A.)
Engineering, Electrical: Harris Joseph Ryan. (505.)
Engineering, Mechanical: Arthur Boquer Domonoske. (260.)
Engineering, School of: Theodore Jesse Hoover, Dean. (530.)
English: William Dinsmore Briggs. (206.)
Food Research: Joseph Stancliffe Davis. (34.)
Geology: Eliot Blackwelder. (340.)
Germanic Languages: William Alpha Cooper. (116.)
Graduate Study: Carl Lucas Alsberg, Dean. (34.)
Graphic Art: Arthur Bridgman Clark. (314.)
History: Payson Jackson Treat. (236.)
Hoover War Library: Ralph Haswell Lutz. (215.)
Hopkins Marine Station: Walter Kenrick Fisher.
Journalism: Everett Wallace Smith. (p1.)
Law, School of: Marion Rice Kirkwood, Dean. (1.)

Letters, School of: Augustus Taber Murray. (257.)
Libraries, University: Nathan Van Patten, Director.
Mathematics: Hans Frederik Blichfeldt. (63.)
Medical Adviser of Men: Thomas Andrew Storey. (g15.)
Medical Adviser of Women: Clelia Duel Mosher. (600.)
Medicine, Department of: Arthur Leonard Bloomfield. (San Francisco.)
Medicine, School of: William Ophüls, Dean. (San Francisco.)
Memorial Church: David Charles Gardner, Chaplain.
Military Science and Tactics: E. R. Warner McCabe. (539.)
Mining and Metallurgy: Theodore Jesse Hoover. (530.)
Museum: Pedro J. Lemos, Director.
Obstetrics and Gynecology: Alfred Baker Spalding. (San Francisco.)
Pathology: William Ophüls. (San Francisco.)
Pediatrics: Harold Kniest Faber. (San Francisco.)
Pharmacology: Paul John Hanzlik. (San Francisco.)
Philosophy: Henry Waldgrave Stuart. (94A.)
Physical Education (Men): Thomas Andrew Storey. (g15.)
Physical Education (Women): Helen Masters Bunting. (Roble Gym.)
Physical Sciences, School of: David Locke Webster. (389.)
Physics: David Locke Webster. (389.)
Physiology: Ernest Gale Martin. (482.)
Political Science: Edwin Angell Cottrell. (25A.)
Psychology: Lewis Madison Terman. (399.)
Public Health and Preventive Medicine: Ernest Charles Dickson. (San Francisco.)
Public Speaking: Lee Emerson Bassett. (203B.)
Romanic Languages: Oliver Martin Johnston. (246.)
Social Sciences, School of: Murray Shipley Wildman. (223.)
Stanford National Board: John Armstrong Sellards, Secretary. (Adm. 173.)
Summer Quarter: John Armstrong Sellards, Dean. (Adm. 173.)
Surgery: Emile Frederic Holman. (San Francisco.)
Zoölogy: John Otterbein Snyder. (443.)

STANDING COMMITTEES OF ACADEMIC COUNCIL

[The first-named member in each committee is Chairman, unless otherwise indicated. The term of office of members of the Executive Committee begins immediately upon election (in May); of all other standing committees, September 1.]

ADVISORY BOARD

Alsberg, Cathcart, Fish, Kirkwood, Meyer, Murray, Peirce, Swain (Chairman), Wildman.

ADMINISTRATIVE COMMITTEES

1. Student Affairs: Moser, Danforth, Harrison, E. G. Martin, Moreno.
2. Athletics (Men): Storey, Canning, Mitchell, Owens, E. W. Smith.
3. Public Exercises: Robinson, Crum, McDowell, Peirce, L. B. Reynolds, Sellards, Shepherd, Stebbins.
4. Public Health: Storey, W. H. Brown, Culver, Mosher, Yost.
5. Scholarship: Vernier, Culver, Dietrich, E. G. Martin, Miles, Mitchell, Storey, Yost.
6. Vocational Guidance: Strong, J. G. Brown, Culver, B. M. Green, Haley, Kirkwood, Mitchell, Proctor, L. B. Reynolds, Yost.
7. Lower Division: Mitchell, C. G. Allen, Brand, B. O. Brown, Canning, Dietrich, Kennedy, Kindy, Miles, Parks, Robinson, Sears, Snyder, G. H. Stuart, Thomas, Yost.
8. Research: Blackwelder, Barnett, Becking, Blichfeldt, Hoover, Hotchkiss, Jones, McBain, Meyer, Ophüls, Seward, G. M. Smith, Webster, Wilbur.

ACADEMIC COMMITTEES

1. Executive Committee: Wilbur, Blackwelder, Briggs, Cathcart, Fish, Foster, Hoover, McDowell, Meyer, Mitchell, Swain, L. M. Terman, Wildman.
2. Admission and Advanced Standing: Mitchell, Proctor, Strong, Tickell, Yost.
3. Registration: Mitchell, W. H. Brown, Culver, Huggins, Weymouth.
4. Graduation: Blackwelder, Domonoske, Jackson, Mirrielees, Mitchell.
5. Schedule and Examinations: Osborne, Holden, Hotelling, Mitchell, Schwartz.
6. Graduate Study: Alsberg, Briggs, Guérard, Kirkwood, Marx, Meyer, Peirce, Ryan, J. P. Smith, H. W. Stuart, Wildman.
7. Library: Kirkwood, Brand, Cooper, Foster, Peirce.
8. University Publications: W. H. Davis, Hoover, Jackson, McBain, G. H. Stuart.
9. Independent Study Plan: Robinson, Guérard, E. G. Martin, H. W. Stuart, Swain, L. M. Terman.

OFFICERS OF INSTRUCTION AND ADMINISTRATION

[Name; residence; postoffice; residence telephone in parentheses; title. The capital letter following residence address indicates location of street (P = Palo Alto, M = Mayfield, MP = Menlo Park, SJ = San Jose, SF = San Francisco, etc.); where capital letter is omitted the residence in all cases is *Stanford University*. The small letter following the capital indicates the postoffice address; where small letter is omitted the postoffice in all cases is *Stanford University*. The numbers (or letters) in italics after the residence address are *Stanford University* postoffice box numbers (or box letters); the asterisk (*) following the address indicates that mail should be addressed to the School, Department, or Office concerned. The numbers 1, 2, 3, 4 in parentheses after name of instructor indicate quarters on duty, i.e., autumn, winter, spring, summer, respectively. Brackets indicate absence on leave for the year. The dagger (†) marks the names of men who are married.]

EMERITUS LIST

ANDERSON, MELVILLE BEST — 1733 W. Twenty-third, Los Angeles-la
Professor of English Literature, Emeritus

A.M., Butler College, 1877; LL.D., Aberdeen, 1906; Dr., University of Padua, 1922; Litt.D., Mills, 1923. At Stanford since 1891, Emeritus since 1910.

ANGELL, FRANK — 1200 Bryant, P-p (PA 87)
Professor of Psychology, Emeritus

B.S., Vermont, 1878; Ph.D., Leipzig, 1891; L.H.D., Vermont, 1892. At Stanford since 1892, Emeritus since 1922.

†BARKAN, ADOLPH — Mill Valley-mv
Professor of Structure and Diseases of Eye, Ear, and Larynx, Emeritus

M.D., University of Vienna, 1866; LL.D., University of Glasgow, 1901. At Stanford since 1909, Emeritus since 1911.

†BLAISDELL, FRANK ELLSWORTH — 207 Gough, SF-sf (Hemlock 4060)
Professor of Surgery, Emeritus

M.D., Cooper Medical College, 1889. At Stanford since 1910, Emeritus since 1927.

†BOEZINGER, BRUNO — Menlo Heights-*1311* (PA 798W)
Associate Professor of German, Emeritus

A.B., Fort Worth University, 1894, A.M., 1895; Ph.D., Stanford, 1910. At Stanford since 1906, Emeritus since 1926.

CAMPBELL, DOUGLAS HOUGHTON — 538 Mayfield-*943* (PA 1036)
Professor of Botany, Emeritus

Ph.M., Michigan, 1882, Ph.D., 1886. At Stanford since 1891, Emeritus since 1925.

CLARK, GEORGE THOMAS — 1729 Emerson, P-p (PA 2082M)
Director of the University Libraries, Emeritus

B.S., California, 1886. At Stanford since 1907, Emeritus since 1928.

†COOPER, CHARLES MINER — 2550 Buchanan, SF-sf (Fillmore 1821)
Clinical Professor of Medicine, Emeritus

M.B.Ch.B., Edinburgh, 1897. At Stanford since 1918, Emeritus since 1922.

†Drew, Elmer Reginald 561 Center, P-p (PA 1921M)
Associate Professor of Physics, Emeritus

B.S., California, 1888; Ph.D., Cornell, 1903. At Stanford since 1905, Emeritus since 1928.

†Durand, William Frederick 623 Cabrillo* (PA 1582)
Professor of Mechanical Engineering, Emeritus

Graduate, U.S. Naval Academy, 1880; Ph.D., Lafayette, 1888; LL.D., California, 1924. At Stanford since 1904, Emeritus since 1924.

†Elliott, Orrin Leslie 756 Santa Ynez (PA 1045)
Registrar, Emeritus

Ph.B., Cornell, 1885, Ph.D., 1890. At Stanford since 1891, Emeritus since 1925.

Elmore, Jefferson 552 Alvarado (PA 1604W)
Professor of Classical Literature, Emeritus

A.B., Stanford, 1895, A.M., 1895, Ph.D., 1901. At Stanford since 1898, Emeritus since 1928.

Fairclough, Henry Rushton 755 Santa Ynez (PA 1479)
Professor of Classical Literature, Emeritus

A.B., Toronto, 1883, A.M., 1886; Ph.D., Johns Hopkins, 1896; Litt.D., Toronto, 1922. At Stanford since 1893, Emeritus since 1927.

†Green, Rufus Lot 541 Salvatierra (PA 1127J)
Professor of Mathematics, Emeritus

B.S., Indiana, 1885, A.M., 1889. At Stanford since 1893, Emeritus since 1927.

Griffin, James Owen 570 Alvarado (PA 1054)
Professor of German, Emeritus

Graduate, Pennsylvania State Normal School, 1873. At Stanford since 1891, Emeritus since 1917.

†Hoskins, Leander Miller 1240 Waverley, P-p (PA 75)
Professor of Applied Mathematics, Emeritus

B.C.E., and B.S., Wisconsin, 1883, M.S., 1885, C.E., 1887. At Stanford since 1892, Emeritus since 1925.

†Jenkins, Oliver Peebles 533 Lasuen-*1515* (PA 1151M)
Professor of Physiology and Histology, Emeritus

A.B., Moore's Hill College, 1869, A.M., 1872; M.S., Indiana, 1886, Ph.D., 1889; LL.D., Moore's Hill College, 1916. At Stanford since 1891, Emeritus since 1916.

†Jordan, David Starr Serra House (PA 1001)
Chancellor, Emeritus

M.S., Cornell, 1872; M.D., Indiana Medical College, 1875; Ph.D., Butler College, 1878; LL.D., Cornell, 1886, Johns Hopkins, 1902, Illinois College, 1903, Indiana, 1909, California, 1915, Western Reserve, 1915. President of the University, 1891–1913, Chancellor, 1913–16, Emeritus since 1916.

†McKee, Albert Brown Woodside, RC-RFD, rc (Redwood 1707F12)
Clinical Professor of Ophthalmology, Emeritus

Ph.B., University of the Pacific, 1883, Ph.M., 1886; M.D., Cooper Medical College, 1886. At Stanford since 1912, Emeritus since 1928.

Martin, Lillien Jane 821–822 Shreve Bldg., SF-sf (Sutter 3489)
Professor of Psychology, Emeritus

A.B., Vassar, 1880; M.L.A., and honorary Ph.D., Bonn, 1913. At Stanford since 1899, Emeritus since 1916.

†Marx, Charles David 357 Kingsley, P-*1091* (PA 255)
Professor of Civil Engineering, Emeritus

B.C.E., Cornell, 1878; C.E., Karlsruhe, Polytechnicum, 1881; LL.D., California, 1918; Dr.Ing.h.c., Karlsruhe, 1925. At Stanford since 1891, Emeritus since 1923.

†Price, George Clinton 532 Alvarado (PA 1053)
Professor of Zoölogy, Emeritus

B.S., De Pauw, 1890; Ph.D., Stanford, 1897. At Stanford since 1892, Emeritus since 1925.

†Rigdon, Rufus Lee 1617 Broderick, SF-sf (Fillmore 2285)
Clinical Professor of Genito-Urinary Surgery, Emeritus, and Consultant in Urology to Lane Hospital

M.D., Cooper Medical College, 1887. At Stanford since 1912, Emeritus since 1925.

†Sanford, Fernando 450 Kingsley, P-p (PA 646)
Professor of Physics, Emeritus

B.S., Carthage College, 1879, M.S., 1882, Sc.D., 1920. At Stanford since 1891, Emeritus since 1919.

Stanley, Edward John 269 Hawthorne, P-p (PA 544W)
Assistant Professor of Mechanical Engineering, Emeritus

At Stanford since 1901, Emeritus since 1927.

†Stillman, Stanley Belvedere-b (B 41)
Professor of Surgery, Emeritus, and Consultant in Surgery to Lane Hospital

M.D., Cooper Medical College, 1889. At Stanford since 1909, Emeritus since 1926.

†Willis, Bailey 539 Lasuen-*1365* (PA 1118)
Professor of Geology, Emeritus

E.M., Columbia School of Mines, 1878, C.E., 1879; Hon. Ph.D., University of Berlin, 1910. At Stanford since 1915, Emeritus since 1922.

ACTIVE LIST

†Abrams, LeRoy (123) 653 Cabrillo (PA 1125)
Professor of Botany, and Director of Dudley Herbarium

A.B., Stanford, 1899, A.M., 1902; Ph.D., Columbia, 1910. Acting Professor of Botany, University of Idaho, 1899–1900; Assistant in Botany, Stanford University, 1900–1902, Instructor, 1902–4; Fellow in Botany, Columbia University, 1904–5; Assistant Curator, Division of Plants, United States National Museum, 1905–6; Lecturer in Botany, University of California, first semester, 1915–16; Field Assistant, U.S. Department of Agriculture, summer, 1918. At Stanford 1900–1904, and since 1906.

†Adams, Ephraim Douglass (123) 746 Santa Ynez-*123* (PA 1058)
Professor of History

A.B., Michigan, 1887, Ph.D., 1890; LL.D., Grinnell, 1917; Litt.D., Tufts, 1918. Principal of High School, McGregor (Ia.), 1887; Principal of High School, Saginaw (Mich.), 1889; Special Agent in Charge of Street Railways, Eleventh Census, Washington (D.C.), 1890; Assistant Professor and afterward Professor of European History, University of Kansas, 1891–1902. At Stanford since 1902.

[†Addis, Thomas 201 San Carlos, Sausalito-s (Sausalito 350)
Professor of Medicine]

M.B.Ch.B., Edinburgh, 1905, M.D., and M.R.C.P., 1908. Clinical Assistant, Medical Out-Patient Department, Royal Infirmary of Edinburgh, 1908, 1911; Medical Registrar, Leith Hospital, 1911; Carnegie Research Scholar and Fellow, 1908–11; Director of the Clinical Laboratory, Lane Hospital, since 1911; Captain, M.C., U.S.A., June, 1918, to July 28, 1919. At Stanford since 1911.

†ALDERSON, HARRY EVERETT (123) 2649 Green, SF-sf (Fillmore 4548)
Clinical Professor of Medicine (Dermatology)

M.D., California, 1900. Graduate Study, Vanderbilt Clinic, New York, 1906, Johns Hopkins, 1907, Berlin, Paris, and London, 1912; Assistant in Skin Diseases, Medical Department, University of California, 1906–12; Professor of Art Anatomy, California School of Design, 1906–12; Chief of Dermatological Clinic, San Francisco Fruit and Flower Mission. At Stanford since 1912.

†ALLEN, CLIFORD GILMORE (123) 637 Alvarado (PA 3347)
Professor of Romanic Languages

A.B., Boston, 1900; A.M., Stanford, 1903; Docteur de l'Université de Paris, 1916. Student, University of Paris, 1903–4; Fellow of Boston University and Student of Universities of Paris and Madrid, 1904–5. At Stanford since 1901.

†ALLEN, WARREN D. (1234) 675 Alvarado (PA 865)
Organist

Associate, American Guild of Organists; Pupil of Rudolph Ganz and Alex von Fielitz, Berlin, 1909–10; studied organ with C. M. Widor, Paris, 1911; member of Busoni Class, Basel, Switzerland, September, 1910; Dean of Conservatory of Music, College of the Pacific, 1913–19. At Stanford since 1918.

ALLEN, YOLANDA SHAW (123) 476 Forest, P-*1454*
Instructor in Physical Education

A.B., Wellesley, 1923. Instructor in Physical Education, Stanford, 1919–21; Instructor in Physical Education, Pomona, 1923–24; Director, Chappell School of Art, Denver, 1924–25; Assistant, Stanford University Hospital, 1925–26; Director of Physical Education, Telegraph Hill Neighborhood Association, San Francisco, 1926–27; Student in Art and Dalcroze Dancing, Europe, 1927–28. At Stanford 1919–21 and since 1928.

†ALMACK, JOHN CONRAD (1234) 683 Alvarado (PA 1170J)
Professor of Education

A.B., Oregon, 1918, A.M., 1920; Ph.D., Stanford, 1923. Principal and Superintendent of Schools, Rockford (Wash.), 1905–15; Editor, Colfax (Wash.), 1915–16; Superintendent of Schools, Coquille (Ore.), 1916–17; Assistant in Education, University of Oregon, 1917–18, Professor of Education and Director of Extension Education, 1918–21; Teaching Fellow, Stanford University, 1921–22. At Stanford since 1922.

ALMOND, NINA (1234) 532 Lasuen-*1077* (PA 1203)
Librarian, Hoover War Library

A.B., Indiana University, 1913. Certificate, Indiana Library School; Head Cataloguer, Indiana University Library, 1914–16. At Stanford since 1916.

†ALONSO DÁMASO (4) Kingscote
Lecturer in Spanish Literature

Ph.D., University of Madrid. Lecturer in Spanish Literature, University of Berlin; Lecturer in Spanish Literature, University of Cambridge, 1928–29.

†ALSBERG, CARL LUCAS (123) 678 Mirada* (PA 3791)
Director, Food Research Institute, and Dean of Graduate Study

A.B., Columbia, 1896, A.M., 1900, M.D. (College of Physicians and Surgeons), 1900. Student, Universities of Strassburg and Berlin, 1900–1903; Assistant in Physiological Chemistry, Harvard University, 1902–5, Instructor in Biological Chemistry, 1905–8; Chemical Biologist, Bureau of Plant Industry, United States Department of Agriculture, 1908–12; Chief, Bureau of Chemistry, 1912–21. At Stanford since 1921.

†ANDERSON, FREDERICK (123) Cedro Cottage-*2525* (PA 1416J)
Associate Professor of Romanic Languages

A.B., Stanford, 1911; A.M., Harvard, 1912; Ph.D., Yale, 1915. Instructor in French and Spanish, Reed College, 1912–13, Sheffield Scientific School, 1913–14, Yale University, 1914–18; Fellow in Yale University, 1914–15. At Stanford since 1920.

†Anderson, Henry Stow (123) 460 Yale, M-Box 83, m (PA 3008J)
Assistant Professor of Economics, and Assistant Director of Citizenship

A.B., Stanford, 1922, A.M., 1923, Ph.D., 1925. Lecturer in Problems of Citizenship, San Francisco State Teachers' College, 1924. At Stanford since 1923.

†Argo, Arnold Clarence (4) 20 Hudson, Redwood City-rc (RC 91)
Acting Assistant Professor of Education

B.S., University of Washington, 1912; A.M., Stanford, 1921. Instructor in high schools, Oregon and Washington, 1912–15; Principal, Clarkston (Wash.), High School, 1915–16; Principal, Grade School, Spokane (Wash.), 1916–18; Superintendent of Schools, Pasco (Wash.), 1918–19; Principal, High School, Redwood City, since 1921; Instructor, University of Oregon, Summer Session, 1927.

†Ashley, Rea Ernest (123) 16 Fifth Ave., SF-sf (Bayview 5905)
Clinical Instructor in Surgery (Otology, Rhinology, Laryngology)

B.S., University of Illinois, 1917, M.D., 1919. Assistant, Department of Bacteriology and Pathology, University of Illinois, 1917–19; Assistant Resident Physician, Stanford University Hospital, 1919–20, Resident, Ear, Nose, and Throat, 1920–22; Postgraduate Study, Vienna, 1928. At Stanford since 1921.

†Atwood, Frank Jarvis (123) 443 Tennyson, P* (PA 1644R)
Associate Professor of Military Science and Tactics (Ordnance), and Metallurgy

A.B., State College of Washington, 1914; B.S., University of Michigan, 1915. Student, Massachusetts Institute of Technology, 1921–23; Major, Ordnance Department, U.S. Army. At Stanford since 1925.

Avery, Curtis Edmund (1) 524 Webster, P-*881*
Instructor in English

A.B., Pomona, 1925; A.M., Yale, 1928. Student, Columbia University, School of Journalism, 1925–26. At Stanford since 1928.

†Bacher, John Adolph (1234) 157 Twenty-fifth Ave., SF-sf (Evergreen 4684)
Associate Clinical Professor of Surgery (Otology, Rhinology, Laryngology)

A.B., Stanford, 1899; M.D., Harvard, 1911. At Stanford since 1917.

†Bachrodt, Walter Lewis (4) 590 S. Fifteenth, San Jose-sj (Ballard 3157R)
Acting Associate Professor of Education

A.B., Stanford, 1920, A.M., 1921. Instructor, San Jose State Teachers College, Summer Sessions, 1922, 1924, 1925, 1926; Acting Instructor in Education, Stanford, Summer Quarter, 1924, Acting Assistant Professor, Summer Quarter, 1928; Superintendent of City Schools, San Jose, since 1921.

Bailey, Margery (1234) 513 Salvatierra* (PA 1025)
Assistant Professor of English

A.B., Stanford, 1914, A.M., 1916; Ph.D., Yale, 1922. Fellow in English, Yale University, 1921–22. At Stanford since 1914.

Baker, Howard Wilson, Jr. (3) 333 Waverley, P-*1514* (PA 1634J)
Acting Instructor in English

A.B., Whittier College, 1927; A.M., Stanford, 1928. Assistant in Instruction, Stanford, 1927–29.

Bane, Suda Lorena (1234) 332 Forest, P*
Assistant Curator, American Relief Administration Archive, Hoover War Library

Assistant, Public Library, Washington, D.C., 1908–17; Assistant Librarian, U.S. Food Administration, 1917–19; Librarian, American Relief Administration, 1919–

28; Assistant Curator, American Relief Administration Archive, Hoover War Library, since 1929.

†Barber, Raymond Jenness (123) Cupertino-c (Santa Clara 20J4)
Lecturer on Hydraulic and Placer Mining

B.S., Massachusetts Institute of Technology, 1906.

Barclay, Thomas Shepard (234) Stanford Union-*1798* (PA 2900)
Associate Professor of Political Science

A.B., Missouri, 1915, A.M., 1916; Ph.D., Columbia, 1924. Gregory Scholar, University of Missouri, 1915–16; Fellow, University of Chicago, 1916–17; United States Department of State, American Peace Commission, 1919–20; University Scholar in Public Law, Columbia University, 1920–22; Assistant Professor of Political Science, University of Missouri, 1922–26, Associate Professor, 1926–27; Acting Professor, North Carolina, Summer Session, 1921. At Stanford since 1927.

†Barkan, Hans (124) 108 Cherry, SF-sf (Skyline 8817)
Clinical Professor of Surgery (Ophthalmology)

A.B., Stanford, 1905; M.D., Harvard Medical School, 1910. Assistant in Pathology, Harvard Medical School, 1910–11, Instructor, 1911–12; Pathologist to the Long Island Hospital and Boston City Almshouse, 1911–12; Voluntary Assistant, Second Eye Clinic, Vienna, 1912–14; Lieutenant, U.S.N.R.F., July to December, 1917; Captain, M.R.C., U.S.A., November 4, 1918, to June 30, 1919. At Stanford since 1914.

†Barkan, Otto (123) 3435 Pacific, SF-sf (Fillmore 3353)
Clinical Instructor in Surgery (Ophthalmology)

B.A., Trinity College, Oxford, 1909; M.D., Munich, 1914; M.R.C.S., London, 1915. House Physician, St. Mary's Hospital, London, 1914–15; Eye Clinics, Vienna and Munich, 1915–19; Eye Clinic, Vienna, 1920; Consulting Ophthalmologist, San Francisco Hospital, Stanford Service, since 1926. At Stanford since 1921.

†Barnett, George de Forest (123) 669 Mirada (PA 899)
Professor of Medicine

A.B., Stanford, 1906, A.M., 1909, M.D., 1913. Instructor in Chemistry, Stanford University, 1909–10; Student, Johns Hopkins Medical School, 1910–12; Senior House Officer, Lane Hospital, 1914–15; Lieutenant, M.C., U.S.N.R.F., 1917–19. At Stanford since 1915.

†Bassett, Lee Emerson (123) 740 Santa Ynez-*1858* (PA 2782)
Professor of English (Public Speaking)

A.B., Stanford, 1901. Graduate, Cummock School of Oratory, Los Angeles, 1898; Instructor in Public Speaking, University of Southern California, 1898–99; Student, School of Expression, Boston, 1901; Student, Oxford University, England, 1907–8; Acting Associate Professor of Public Speaking, University of Washington, 1912–13; Professor of Public Speaking, University of Colorado, Summer Session, 1919, 1923, University of California, Intersession, 1922, Northwestern University, Summer Session, 1925. At Stanford since 1900.

†Baumberger, James Percy (123) 328 Churchill, P* (PA 767M)
Associate Professor of Physiology

B.S., California, 1914; M.S., Harvard, 1916, D.Sc., 1918. Student, Yale Army Laboratory School, 1918; Assistant in Zoölogy, Harvard University, 1914–18, Assistant in Botany, 1918, Austin Teaching Fellow in Zoölogy, 1917–18, Teaching Fellow in Physiology, 1922; Assistant in Physiology, Radcliffe College, 1917, Assistant in Entomology, 1918; Instructor in Natural Sciences, Lowthorpe Horticulture School, 1915–18; Traumatic Shock Laboratory, A.E.F., 1918–19; C.R.B. and American Scandinavian Fellow for Research in Bruxelles, Naples, Lund, and Copenhagen, June 1925–December 1926. At Stanford since 1919.

Beach, Walter Edwards (4) 521 Salvatierra-*128* (PA 1052R)
Acting Instructor in Economics

A.B., Stanford, 1922; A.M., Harvard, 1926. Instructor in Economics, Bowdoin College, 1926–28.

†Beach, Walter Greenwood (124) 521 Salvatierra-*128* (PA 1052R)
Professor of Social Science

A.B., Marietta, 1888; A.B., Harvard, 1891, A.M., 1892. Professor of Philosophy and History, Marietta College for Women, 1893–97; Student, Stanford University, 1897–98; Assistant Professor and afterward Professor and Head of Department of Economic Science and History, State College of Washington, 1898–1910; Professor of Social Science, University of Washington, 1910–17; Dean of College of Sciences and Arts, and Professor of Social Science, State College of Washington, 1917–20; Lecturer in Economics, University of California, Summer Session, 1924. At Stanford since 1920.

†Beard, Paul Jay (23) 530 Webster, P* (PA 3866M)
Acting Instructor in Bacteriology

B.S., Iowa State College of Agriculture and Mechanical Arts, 1925, M.S., 1927; Ph.D., Stanford, 1929.

†Beaver, Harold Jay (1) 727 Seneca, P-p (PA 2815)
Assistant Medical Adviser of Men

B.S., State College of Washington, 1916; M.D., Stanford, 1924. At Stanford since 1927.

†Becking, Laurence B. (1234) Twelfth and Dolores, Carmel-c (Carmel 129)
Herzstein Professor of Biology

A.B., Utrecht, 1917, M.S., 1919, D.Sc., 1921; Ph.D., Stanford, 1921. At Stanford since 1920.

†Bell, Reginald (123) Roble Ridge, M-*2013* (PA 3377J)
Instructor in Citizenship

A.B., Oberlin, 1916; A.M., Stanford, 1928. At Stanford since 1927.

†Benjamin, Harold Raymond Wayne (1234) 661 Columbia, M-*1037* (PA 637J)
Associate Professor of Education and Director of Practice Teaching

A.B., University of Oregon, 1920, A.M., 1924; Ph.D., Stanford, 1927. Principal, Elementary Schools, Salem (Ore.), 1915–17; Superintendent of Schools, Umatilla (Ore.), 1920–22; Principal of University High School and Assistant Professor of Education, University of Oregon, 1922–25; Acting Assistant Professor of Education, Michigan State Normal College, Ypsilanti (Mich.), Summer Session, 1924; Assistant in Practice Teaching, Stanford, 1925–27. At Stanford since 1925.

Bennett, Cassie E. (Mrs.) (1234) 158 Kingsley, P* (PA 782W)
Secretary, Economics

At Stanford since 1924.

†Bennett, Merrill Kelley (1234) 1103 Ramona, P-p (PA 1472J)
Research Associate, Food Research Institute

Ph.B., Brown, 1920, A.M., 1921; A.M., Harvard, 1926; Ph.D., Stanford, 1927. Assistant in English, Brown, 1920–21, Instructor, 1921–22; Instructor in English, Stanford, 1922–23, Junior Research Associate, Food Research Institute, 1923–25; Weld Fellow in Economics, Harvard, 1925–26. At Stanford, 1922–25, and since 1926.

Bergstrom, Francis William (1234) 585 Salvatierra* (PA 1042W)
Assistant Professor of Chemistry

A.B., Stanford, 1918, Engineer, 1919, Ph.D., 1922. National Research Fellow in Chemistry at Clark and Brown Universities, 1922–25. At Stanford since 1925.

Bingham, Florence Cornell (Mrs.) (4) 653 Melville, P-p (PA 3386J)
Lecturer in Education

A.B., Hunter College, 1905; A.B., Cornell University, 1906. Graduate Student (Law), Cornell, 1906–7, Stanford, 1907; Legal Investigator, War Trade Board (Civil Service), 1918.

†Bingham, Joseph Walter (123) 653 Melville, P* (PA 3386J)
Professor of Law

A.B., Chicago, 1902, J.D., 1904. In practice of law, Chicago, 1904–5; Acting Assistant Professor of Law, Cornell University, 1905–7; Professor of Law, University of Chicago, Summer Quarter, 1916; Acting Professor of Law, University of Michigan, Summer Session, 1923; Acting Professor of Law, University of California, Summer Session, 1925; Visiting Professor of Law, Columbia, 1926–27; Acting Professor of Law, University of Wisconsin, Summer Session, 1927. At Stanford since 1907.

†Blackwelder, Eliot (13) Escondite Cottage-*N* (PA 895R)
Professor of Geology

A.B., Chicago, 1901, Ph.D., 1914. Fellow and Assistant in Geology, University of Chicago, 1902–3; Paleontologist, Carnegie Institution Expedition to China, 1903–4; Instructor and afterward Professor of Geology, University of Wisconsin, 1905–16; Professor and Head of Department of Geology, University of Illinois, 1916–19; Lecturer in Geology, University of Chicago, 1907, 1916, Stanford University, 1919, Harvard University, 1921; Geologist, U.S. Geological Survey, 1902, 1906–18; Chief Geologist, Argus Oil Company, 1919–21; Manager, Teton Syndicate, 1921–22. At Stanford since 1922.

Blichfeldt, Hans Frederik (123) 321 Castilleja, P-*875* (PA 397R)
Professor of Mathematics

A.B., Stanford, 1896; Ph.D., Leipzig, 1898. At Stanford since 1898.

†Blodgett, David P. (1234) 130 Cowper, P-p (PA 815R)
Office Manager, Treasurer's Office

At Stanford since 1907.

†Bloomfield, Arthur Leonard (1234) 100 Walnut, SF-sf (Fillmore 9544)
Professor of Medicine

A.B., Johns Hopkins, 1907, M.D., 1911. Assistant, Instructor, Associate in Medicine, Johns Hopkins, 1912–22, Associate Professor of Medicine, 1922–26. At Stanford since 1926.

†Boardman, Walter Whitney (1234) 37 Walnut, SF-sf (Fillmore 2506)
Associate Clinical Professor of Medicine

M.D., Cooper Medical College, 1909. Assistant in Phipps Dispensary, Johns Hopkins Hospital, 1910, Assistant in Actinography and Externe in Gynecology, 1911; Lieutenant, U.S.N.R.F., July, 1917, to December, 1918. At Stanford since 1912.

Boulware, Edna (1234) 170 Bryant, P-p (PA 403J)
Secretary, Chemistry

At Stanford since 1916.

†Bradshaw, James (1234) 738 Cowper, P* (PA 1730W)
Assistant Director, Department of Physical Education and Hygiene

A.B., University of Nevada, 1922. At Stanford since 1928.

Brand, Carl Fremont (123) 220 Stanford Union-*1696* (PA 2900)
Assistant Professor of History

A.B., Indiana, 1915, A.M., 1916; A.M., Harvard, 1918, Ph.D., 1923. Teacher of History, Hammond (Ind.) High School, 1916–17; University Scholar, Harvard University, 1917–18. Austin Teaching Fellow, 1918–19; Instructor in History, Smith College, 1919–20; Parker Travelling Fellow, Harvard University, 1920–21; Instructor in History, University of Michigan, 1921–24; on Faculty, Washington State College, Summer Session, 1925, University of Washington, 1927. At Stanford since 1924.

†Brandsten, Ernst M. (34) Searsville Lake Park-*1085* (RC 11F12)
Associate Director of Water Sports

Teacher of Swimming, Municipal Baths, Stockholm, Sweden, 1905; Swimming Coach, Neptune Swimming Club, Stockholm, 1906, University of California, 1911, 1913–15. At Stanford since 1915.

BRASHEAR, EDITH A. (MRS.) (1234) 256 University, Los Gatos-lg (LG 39R)
Secretary, Registrar's Office

At Stanford since 1926.

‡BRENNER, JAMES EMMET (1234) 1044 Hamilton, P-p (PA 3838W)
Law Librarian, and Associate Professor of Law

Graduate, United States Naval Academy, 1913; J.D., Stanford, 1927. At Stanford since 1927.

†BRIGGS, WILLIAM DINSMORE (1234) 526 Mayfield-*53* (PA 2918)
Professor of English

A.B., Stanford, 1896; A.M., Harvard, 1899, Ph.D., 1900. Student, Johns Hopkins University, 1896–97; Instructor in English and German, University of Vermont, 1900–1901; Instructor in English, Western Reserve University, 1901–6. At Stanford since 1906.

BRINTON, ANNA COX (MRS.) (4) 607 Gerona (PA 1731W)
Acting Professor of Classical Literature

A.B., Stanford, 1909, A.M., 1913, Ph.D., 1917. Instructor in Latin, College of the Pacific, 1909–12, Stanford, 1912–13; Student, American School of Classical Studies, Rome, 1913–14; Assistant in Latin, Stanford, 1914–15; Assistant Professor of Latin, Mills College, 1917–19; Professor, 1919–22; Acting Assistant Professor, Stanford, Summer Quarter, 1919, 1928; Professor of Latin, Earlham College, 1922–29.

§BRODRICK, RICHARD GODFREY (123)
Professor of Hospital and Health Administration (Public Health and Preventive Medicine), and Physician Superintendent of Lane and Stanford University Hospitals

M.D., Cooper Medical College, 1892. Commissioned Assistant and Passed Assistant Surgeon, U.S. Navy, 1893–99; Post-graduate work, University of Vienna, Austria, 1899–1903; Health Officer, San Francisco, and Consultant, San Francisco Hospital, 1908–14; Superintendent, San Francisco Hospital, 1914–19; Director of Hospitals of Alameda County and Consultant to Highland Hospital, 1919–27; President, American Hospital Association, 1926–27. At Stanford since 1927.

BROWN, ADELAIDE (1234) 45 Sixteenth Ave., SF-sf (Evergreen 6917)
Lecturer in Pediatrics (Child Hygiene)

A.B., Smith, 1888; M.D., Cooper Medical College, 1892. Interne, New England Hospital, Boston (Mass.), 1893; Student, Berlin, Leipzig, Dresden, Vienna, 1894; Student, Johns Hopkins, 1898; Children's Hospital, 1899–1915; Member, State Board of Health, 1915. At Stanford since 1920.

†BROWN, BUFORD OTIS (124) 613 Salvatierra-*678* (PA 2485)
Associate Professor of Journalism

A.B., Missouri, 1908, B.J., 1912. Bursar, Texas Woman's College, 1909–11; Instructor in Journalism, University of Texas, 1914–17; Secretary, Ground School of Military Aëronautics, University of Texas, 1917; Visiting Lecturer, Texas Agricultural and Mechanical College, Summer Sessions, 1922, 1923; Editor *Plainview* (Tex.) *Evening Herald*, 1912–14, *Vernon Record*, 1918–22; Special Correspondent, *Wichita Falls Times* and *Dallas News*, 1922; Associate Professor, University of California at Los Angeles, Summer Sessions, 1924–27. At Stanford since 1923.

†BROWN, HAROLD CHAPMAN (1) 546 Washington, P* (PA 1006)
Professor of Philosophy

A.B., Williams, 1901; A.M., Harvard, 1903, Ph.D., 1905. Student, University of Berlin, 1903–4; Assistant in Philosophy, Harvard University, 1904–6; Instructor in Philosophy, Columbia University, 1906–14, Columbia University, Summer Sessions, 1915, 1917; Acting Professor, University of California, Second Semester, 1922, Intersessions, 1920, 1922, 1924, 1926; Acting Professor, University of Washington, Summer Quarter, 1925, University of Chicago, Summer Quarter, 1927. At Stanford since 1914.

§ Deceased, May 2, 1929.

BROWN, JOSEPH GRANT (123) 1013 Ramona, P* (PA 4107W)
Associate Professor of Physics

A.B., Stanford, 1901, A.M., 1903. Graduate, Illinois State Normal University, 1894, Instructor in Physics and Chemistry, 1894–98. At Stanford since 1900.

†BROWN, WALTER HENRY (1234) 444 Tennyson, P-p (PA 2741R)
Professor of Hygiene and Physical Education

M.D., Jefferson Medical College, 1906. C.P.H., Harvard Technology School for Health Officers, 1914; Instructor, Department of Hygiene, Yale University, 1916–19; Lecturer in Public Health, School of Social Work, University of Oregon, 1925–27. At Stanford since 1928.

BUCKINGHAM, ELISABETH LEE (124) 534 Lasuen-*102* (PA 1203)
Assistant Professor of English (Public Speaking)

A.B., Stanford, 1910, A.M., 1914. Student, Columbia College of Expression, Summer, 1913; Teacher of Public Speaking, State Normal School, San Jose, 1914; Student, Columbia University, 1917–18, and Summer Sessions, 1916, 1919. At Stanford since 1911.

BUGGE, ELWYN BAIDON (1234) 639 University, P*
Instructor in Physical Education and Hygiene

A.B., Stanford, 1926. At Stanford since 1928.

BUNTING, HELEN MASTERS (123) 736 Coronado* (PA 3452)
Assistant Professor and Director of Physical Education for Women

A.B., Stanford, 1924; A.M., Columbia, 1927. Graduate, Department of Hygiene, Wellesley College, 1912; Instructor in Physical Education, Centenary Collegiate Institute, Hackettstown (N.J.), 1912–14; Director, Physical Education for Women, University of Colorado, 1914–19. At Stanford since 1919.

†BURLINGAME, LEONAS LANCELOT (123) 614 Alvarado* (PA 1144)
Professor of Biology

Ph.B., Ohio Northern University, 1901; A.B., Chicago, 1906, Ph.D., 1908. Instructor in Biology, Ohio Northern University, 1901–4; Fellow in Botany, University of Chicago, 1906, Assistant, 1906–8; Acting Professor of Biology, University of Oregon, Summer Sessions, 1924, 1925. At Stanford since 1908.

†BURLINGAME, RALEIGH W. (123) San Francisco Hospital, SF-sf
Clinical Instructor in Pediatrics [(Mission 0820)

M.D., University of Missouri, 1912. Interne, House of Correction Hospital, Chicago, 1915–16; House Officer, San Francisco Hospital, 1916–17; Resident Physician in Charge, San Francisco Isolation Hospitals, since 1917; Diagnostician in Communicable Diseases to San Francisco Board of Health since 1918; Director of San Francisco Social Hygiene Clinic since 1919; Instructor to Nurses in Communicable Diseases, San Francisco Hospital, since 1918, Stanford Hospital, 1919–27. At Stanford since 1927.

†BURROWS, JOHN ROBERT (123) 2406 Clay, SF-sf (Fillmore 2833)
Assistant Clinical Professor of Surgery (Anesthesia)

M.D., Cooper Medical College, 1906. Assistant in Ophthalmology, Cooper Medical College, 1909; Assistant Anesthetist, Lane Hospital, since 1910. At Stanford 1912–19, and since 1921.

BUSCHE, MARGARET JEANETTE (123) 2120 California, SF-sf (West 3756)
Instructor in Theory of Nursing

B.S., Cincinnati, 1922. Graduate, School of Nursing and Health, University of Cincinnati, 1921, Assistant Instructor, 1921–23; Instructor, Cincinnati and Hamilton County Chapter, American Red Cross, 1923–24; Instructor, School of Nursing, The Tennessee Coal, Iron, and R.R. Co., Fairfield (Ala.), 1924–25. At Stanford since 1926.

†Butler, Edmund (1234) 2539 Vallejo, SF-sf (Fillmore 1985)
Assistant Clinical Professor of Surgery

M.D., Cooper Medical College, 1911; Senior Interne, Resident in Surgery, Lane Hospital, 1912–14; Surgeon, S.F. Emergency Hospital, 1914–19; Lieutenant, U.S.N. R.F., December, 1917, to March, 1919; Chief Surgeon, San Francisco Emergency Service, 1919. At Stanford since 1920.

†Button, Roy H. (1234) 812 Forest, P* (PA 281W)
Superintendent of Buildings and Grounds

At Stanford since 1924.

†Campbell, John Lockhart (123) 716 Carmel, Berkeley-b
Clinic Dentist [(Berkeley 4496W)

D.D.S., California, 1917. Clinic Dentist, San Francisco Polyclinic, 1917–18, Baby Hospital of Alameda County, 1917–19; Detention Home of Juvenile Court of City and County of San Francisco, since 1918; Assistant in Clinical Dentistry, University of California, 1918–19; Lieutenant, D.C., U.S.A. At Stanford since 1919.

†Canning, John Bennet (123) Santa Cruz Road-*76* (PA 724W)
Associate Professor of Economics

Ph.B., Chicago, 1913. Graduate Scholar in Political Economy, University of Chicago, 1913–14, Assistant, 1914–15, Instructor, 1915–17; Assistant Professor of Economics, University of California, Intersession, 1920, 1921; Assistant Professor of Political Economy, University of Chicago, Summer Quarter, 1924. At Stanford since 1919.

[†Cannon, William Austin
Lecturer in Botany]

†Carr, William George (4) 759 Middlefield, P-p (PA 693W)
Acting Assistant Professor of Education

A.B., Stanford, 1924, A.M., 1926. Instructor, Glendale Public Schools, 1924–25; Professor of Education, Pacific University, 1926–27; Cubberley Fellow in School Administration, Stanford, 1927–29; Director of Research, California Teachers Association, 1927–28; Assistant Director, Research Division, National Education Association, Washington (D.C.), since January 1929.

†Carroll, Joseph Snyder (123) 601 Channing, P-p (PA 2681W)
Assistant Professor of Electrical Engineering

B.S., Utah, 1920; Engineer, Stanford, 1924. At Stanford since 1924.

Carson, Donald Alfonso (123) Lane Hospital, SF-sf (West 6193)
Clinical Instructor in Medicine

A.B., Yale, 1919; M.D., Columbia, 1925. Interne, Johns Hopkins Hospital, Baltimore, 1925–26; Assistant Resident Physician, Presbyterian Hospital, New York, and Assistant Instructor in Medicine, College of Physicians and Surgeons, 1926–27. At Stanford since 1927.

†Case, Roscoe David (4) Kingscote
Acting Assistant Professor of Education

A.B., University of Denver, 1922, A.M., 1923. Superintendent of Schools, Iowa and Colorado, 1913–24; Instructor in English, University of Denver, 1921–22; Extension Lecturer, University of Colorado and Colorado State Teachers College, Greeley, 1926–29; Superintendent of City Schools, Brush (Colo.), since 1924.

†Cathcart, Arthur Martin (1234) 1215 Emerson, P* (PA 197)
Professor of Law

A.B., Stanford, 1896. Student, Harvard University, 1896–97; Attorney at Law, Colorado Springs (Colo.), 1903–4; Lecturer in Law, University of California, Summer Sessions, 1908, 1924; Professor of Law, University of Chicago, Summer Quarters, 1911, 1922; Lecturer in Law, University of California, 1927–28. At Stanford since 1904.

†CATTON, JOSEPH HENRY (123) 2172 Pacific, SF-sf (Fillmore 0094)
Assistant Clinical Professor of Medicine (Neurology)

B.S., California, 1911, M.D., 1913. Voluntary Assistant in Medicine, University of California, 1914–16, Assistant in Medicine, 1916; Chief of Medical Clinic, San Francisco Polyclinic, 1917–19; Assistant Visiting Physician, San Francisco Hospital, 1914–17, Visiting Physician, 1917; Major, M.C., U.S.A.; Consultant, Neuropsychiatry, U.S. Veterans' Bureau and U.S. Employees' Compensation Commission. At Stanford since 1919.

†CHAMBERLAIN, WILLIAM EDWARD (1234) 11 San Leandro Way, SF-sf (Lockhaven 4283)
Professor of Medicine (Radiology), and Director of Department of Radiology

B.S., California, 1913, M.D., 1916. Assistant in Roentgenology, University of California Medical School, 1916–17; Visiting Roentgenologist to the French Hospital, San Francisco, 1917; Roentgenologist of U.S. Navy Base Hospital No. 2, 1917–18; Instructor in Roentgenology, University of California Medical School, 1919–20; Roentgenologist in Charge, Children's, Hahnemann, and St. Mary's Hospitals, San Francisco, 1919–20. At Stanford since 1920.

†CHANDLER, LOREN ROSCOE (123) 2474 Francisco, SF-sf (Fillmore 10258)
Clinical Instructor in Surgery

A.B., Stanford, 1920, M.D., 1923. Senior Interne in Surgery, Lane Hospital, 1923–24; Diplomate, National Board of Medical Examiners, 1923; Resident Surgeon, Lane Hospital, 1924–25. At Stanford since 1923.

†CHENEY, GARNETT (123) 140 Chaves, SF-sf (Lockhaven 3176)
Clinical Instructor in Medicine

A.B., California, 1920; M.D., Harvard, 1923. Student in Pathology, Vienna (six months); Student in Medicine, London (fifteen months); Senior Interne in Medicine, Lane Hospital, 1925–26; Resident in Medicine, Lane Hospital, 1926–27; Assistant Visiting Physician to the San Francisco Relief Home, 1928; Consultant Gastroenterologist to the Veterans' Hospital, Palo Alto, 1928. At Stanford since 1925.

†CHENEY, WILLIAM FITCH (123) 33 Spruce, SF-sf (Bayview 7720)
Clinical Professor of Medicine

B.L., California, 1885; M.D., Cooper Medical College, 1889. Professor of Principles and Practice of Medicine, Cooper Medical College, 1898–1912. At Stanford since 1909.

†CHERINGTON, PAUL TERRY (123) 755 Santa Ynez (PA 3371)
Professor of Marketing and Distribution (Graduate School of Business)

S.B., University of Pennsylvania, 1902, A.M., 1908. Instructor in Commercial Resources, Graduate School of Business Administration, Harvard University, 1908–13, Assistant Professor of Marketing, 1908–18, Professor, 1918–19. At Stanford since 1928.

†VON CHRISTIERSON, SIGURD (123) 70 San Andreas Way, SF-sf (Sunset 8970)
Clinical Instructor in Surgery (Otology, Rhinology, Laryngology)

A.B., Stanford, 1917, M.D., 1922. Resident, Ear, Nose, and Throat, Stanford Hospital, 1922–23; Visiting Aurist, Shriners' Hospital; Aurist, Southern Pacific Hospital. At Stanford since 1922.

†CLARK, ARTHUR BRIDGMAN (124) 767 Santa Ynez* (PA 1023)
Professor of Education (Graphic Art)

B.Ar., Syracuse, 1888, M.Ar., 1891. Director of Trade Schools and Instructor in Drawing, New York State Reformatory, Elmira (N.Y.), 1888–89; Instructor in Architecture, Syracuse University, 1889–92; Student in Painting, New York School of Art and Académie Carmen, Paris, 1898–99; Instructor in Pottery, California

School of Arts and Crafts, Berkeley, Summer Session, 1913, 1914; Director, San Francisco Art Association, 1917; Lecturer, California School of Fine Arts, 1919–20. At Stanford since 1892.

†Clark, Harry (2) 1934 Waverley, P* (PA 3875)
Acting Professor of Physics

B.S., New York University, 1907, M.S., 1908; A.M., Harvard, 1911, Ph.D., 1914. Assistant in Physics, New York University, 1905–7, in Mathematics, 1906–7; Assistant in Physics, Stevens Institute, 1908–9; Assistant and Fellow, Harvard, 1910–14, Instructor, 1914–17; Instructor, Radcliffe, 1914, 1916; Professor, Victoria University College (New Zealand), 1917–19; Associate Professor, Oberlin, 1919–20; Associate Member, Rockefeller Institute for Medical Research, since 1920; Acting Professor, Stanford, Summer Quarter, 1928.

†Clark, William Redwood Price (123) 2710 Filbert, SF-sf
Clinical Professor of Medicine (Tuberculosis) [(Walnut 5106)

M.D., Cooper Medical College, 1899. Assistant Visiting Physician, City and County Hospital, San Francisco, 1901–4; Instructor in Medicine, Cooper Medical College, 1905–11; Visiting Physician, Clinic of the San Francisco Association for the Study and Prevention of Tuberculosis, 1909–12; Visiting Physician, City and County Tuberculosis Hospital, San Francisco, 1911–26; Major, M.C., U.S.A., November 1917 to January 1919. At Stanford since 1911.

[Clinton, Isabella Mary 2345 Polk, SF-sf (Graystone 3797)
Clinical Instructor in Medicine (Tuberculosis)]

Ph.G., California College of Pharmacy, 1916; M.D., Women's Medical College of Pennsylvania, 1922. Assistant Resident Physician, Trudeau Sanatorium, 1922; House Officer in Medicine and Tuberculosis, San Francisco Hospital, 1923–24; Visiting Physician, Arequipa Sanatorium, since 1923. At Stanford since 1924.

†Clyde, Paul Hibbert (123) 1019 Bryant, P-*42* (PA 3197)
Acting Assistant Professor of History

A.B., Stanford, 1920, A.M., 1922, Ph.D., 1925. Fellow in History, Stanford, 1923–25; Instructor in History, Ohio State University, 1925–27, Assistant Professor since 1927; Acting Professor of History, University of Kentucky, Summer Quarter, 1926, 1927; Acting Assistant Professor of History, Stanford, Summer Quarter, 1928.

†Coester, Alfred (123) 435 Homer, P-*1725* (PA 3401)
Professor of Spanish-American Literature

A.B., Harvard, 1896, A.M., 1906, Ph.D., 1906. Student, University of Seville, Spain, 1901–2, University of Berlin, 1894–95, Sorbonne, 1895; Secretary-Treasurer, American Association of Teachers of Spanish, 1917–26; Editor, *Hispania*; Caballero de la real orden de Isabel la Católica; Member, Hispanic Society of America; Corresponding member, Real Academia Hispano-Americana de Ciencias y Artes, Cadiz; Corresponding member, Junta de Historia y Numismática Americana, Buenos Aires. At Stanford, Summer Quarter, 1919, and since 1920.

Cooper, Alice Cecilia (4) 624 Lasuen (PA 1061W)
Acting Assistant Professor of Education

A.B., Stanford, 1907, A.M., 1908. Instructor in English, Polytechnic High School, Los Angeles, 1908–20; Instructor in English, University High School, Oakland, 1920–21, Assistant Supervisor of English, 1921–23, Supervisor of Senior English, 1923–28; Instructor in Methods in Teaching English, University of California, 1923–28; Lecturer in English, Stanford, Summer Quarter, 1926, Acting Assistant Professor of Education, Summer Quarter, 1928; Instructor in Literature, Modesto Junior College, since 1928.

†Cooper, William Alpha (123) 625 Salvatierra (PA 593)
Professor of German

A.B., Marietta, 1892, A.M., 1897, Litt.D., 1917. Student, Universities of Bonn, Leipzig, and Paris, 1892–94, Stanford University, 1901–3, University of Berlin, 1908–9; Instructor in German and French, Marietta College, 1895–99, Professor, 1899–1901. At Stanford since 1901.

†Coover, John Edgar (123) 535 Salvatierra-*648* (PA 933)
Fellow in Psychic Research, and Associate Professor of Psychology

A.B., Stanford, 1904, A.M., 1905, Ph.D., 1912. Principal, Como (Colo.) Schools, 1898–99; Principal, Sonora (Calif.) High School, 1905–7, Dixon High School, 1907–10; Assistant in Psychology, Stanford University, 1910–12; Captain, Sanitary Corps, U.S.A., Psychological Division, Medical Research Laboratory (Military Aëronautics), 1918–19. At Stanford since 1910.

†Cottrell, Edwin Angell (134) 257 Kingsley, P-*1798* (PA 109)
Professor of Political Science

A.B., Swarthmore, 1907; A.M., Harvard, 1913. Instructor in Political Science, Pennsylvania State College, 1907–11, Assistant Registrar, 1909–11; Assistant in Government, Harvard University, 1911–15; Swarthmore Fellow, 1912–13; Instructor in Government, Wellesley College, 1912–17; Lecturer in Constitutional Government, Brown University, 1915–16; Secretary of the Boston Budget Commission, 1915; Assistant Secretary, Boston Chamber of Commerce, 1916–17; Professor of Political Science, and Director of the Bureau of Governmental Research, Ohio State University, 1917–19; Special Investigator, United States Bureau of Efficiency, 1918; Visiting Lecturer in Government, Harvard University, Summer, 1913, Spring, 1922; Visiting Professor, University of Washington, Summer Quarter, 1925. At Stanford since 1919.

§Cowan, John Francis (123)
Clinical Professor of Surgery

A.B., Stanford, 1902; M.D., Cornell University Medical College, 1910. Assistant and Acting Instructor in Physiology, Stanford University, 1903–6; Instructor in Physiology, Cornell University Medical College, 1906–9; Interne, New York Hospital, 1910–12, Resident Surgeon, 1912–13; Lieutenant Surgeon, U.S.N.R.F., July, 1917, to December, 1918. At Stanford since 1913.

†Cowdery, Karl Montague (1234) 621 Alvarado-*2705* (PA 1604J)
Assistant Registrar

A.B., Oberlin, 1915; A.M., Stanford, 1922, Ph.D., 1926. Student, Eugenics Record Office, Summer, 1915; Research Worker, Whittier State School, 1915–17; Psychological Examiner, U.S. Army, 1918; Assistant Superintendent, Whittier State School, 1919–22, Director of Education, 1922–23; Teaching Assistant in Psychology, Stanford, 1923–24. At Stanford since 1923.

Craig, Florence M. (1234) 940 Waverley, P* (PA 2052)
Reviser, Catalogue Department, Library

A.B., University of Minnesota, 1914; B.L.S., University of Illinois, 1917. Assistant, University of Minnesota Library, 1917–18; with the H. W. Wilson Company, New York City, 1925–26. At Stanford, 1918–25, and since 1926.

†Craig, Hardin (123) 611 Alvarado-*2815* (PA 515M)
Professor of English

A.B., Centre College, 1897; A.M., Princeton, 1899, Ph.D., 1901. Instructor in English, Princeton, 1901–5, Edgerstoune Preceptor in English, 1905–10; Professor of English, University of Minnesota, 1910–19; Professor of English and Head of Department, University of Iowa, 1919–28. At Stanford since 1928.

Craig, Robert Glenn (123) Hotel Fairmont, SF-sf (Douglas 8800)
Clinical Instructor in Obstetrics and Gynecology

A.B., Washington and Lee University, 1917; M.D., Johns Hopkins, 1922. Resident House Officer, Johns Hopkins Hospital, 1922–23; Assistant in Pathology, Johns Hopkins Medical School, 1923–24, Assistant and Instructor in Gynecology, 1923–27; Assistant Resident in Gynecology, Johns Hopkins Hospital, 1923–26, Resident Gynecologist, 1926–27. At Stanford since 1928.

Creglow, Loran Andrew (123) Stanford Union* (PA 2900)
Instructor in Metallurgy

A.B., Stanford, 1922, Engineer, 1925, Assistant in Metallurgy, 1923–25; Metallurgist, U.S.S.R.&M. Co., 1925–27. At Stanford since 1927.

§ Deceased, May 16, 1929.

CRESSEY, MARION EMILY (1234) 424 Seneca, P-*892* (PA 1524W)
Assistant Director (Stanford Union)
At Stanford since 1928.

†CROFT, HUBER OGILVIE (123) 711 Columbia, M-*2813* (PA 2313R)
Associate Professor of Mechanical Engineering
B.S., University of Colorado, 1918; M.S., University of Illinois, 1924. Air Service, U.S.A., 1918–19; Swift & Co., 1919–20; Assistant to Durbin Van Law, Consulting Power Plant Engineer, 1921–22; Summer work for Terrell Croft, Consulting Engineer, Hudson River Tunnel Commission, City of St. Louis, and Public Service Company of Northern Illinois; Instructor, University of Illinois, 1922–23, Associate, 1924, Assistant Professor, 1925–26. At Stanford since 1927.

†CROOK, WELTON JOSEPH (123) 675 San Juan-*985* (PA 1035)
Professor of Metallurgy
A.B., Stanford, 1911, Engineer, 1919. Chemist and Assayer, Department of Mines and Water Supply, Victorian Government, Australia, 1907–8; Assistant, Department of Metallurgy, Stanford University, 1910; Chief Chemist, Pacific Coast Steel Company, South San Francisco, 1911–13; Professor of Metallurgy, State School of Mines, South Dakota, 1913–17; Metallurgical Chemist, U.S. Bureau of Mines, P.P.I.E., 1915; Metallurgist and Chief Chemist, Pacific Coast Steel Company, 1917–19, Metallurgist and Chief Inspector, 1919–20, Chief Metallurgist, 1920–21; Co-operating Analyst, U.S. Bureau of Standards, since 1920; Consulting Engineer, U.S. Bureau of Mines, 1922; Consulting Metallurgical Engineer, Pacific Coast Steel Company, San Francisco, since 1922, The D. and B. Pump and Supply Company, Los Angeles, since 1926, the Elliott Core Drilling Company, Los Angeles, since 1926, The General Petroleum Corporation, Los Angeles, since 1927; Major Staff Specialist Reserve, U.S. Army, since 1927. At Stanford since 1921.

†CROSS, CHARLES NORMAN (123) 634 Alvarado-*1206* (PA 526W)
Associate Professor of Mechanical Engineering
M.E., Cornell, 1906. Assistant Engineer, Long Island State Hospital, Brooklyn (N.Y.), 1905; Dynamo and Switchboard Attendant with the New York Edison Co., New York City, 1905–6; Electrician with the Lackawanna Steel Co., Buffalo (N.Y.), 1906; with Turbine Research Department of General Electric Company, Lynn (Mass.), 1914–15; Consulting Engineer, Pacific Gas and Electric Company, and Palo Alto Gas Company, 1917; Efficiency Engineer, Federal Fuel Administration, 1918; Member, Committee on Revision of Boiler Safety Orders, Industrial Accident Commission of the State of California, 1921–22; Consulting and Engineering work with various corporations during summer vacations. At Stanford since 1906.

†CROWE, THOMAS B. (123) 233 Tennyson, P-p (PA 1908W)
Lecturer in Metallurgy
E.M., Colorado School of Mines, 1900.

CRUM, WILLIAM LEONARD (123) 1319 Bryant, P-*2743*
Professor of Statistics (Graduate School of Business)
A.B., Williams, 1914; A.M., Yale, 1916, Ph.D., 1917. Instructor in Mathematics, Yale, 1917 and 1919–22; Assistant Professor of Mathematics, Williams, 1921, Yale, 1922–23; Assistant Professor of Statistics, Harvard, 1923–27; Associated with Harvard University Committee on Economic Research, 1922, and since 1923; Editor, *Review of Economic Statistics*, since September, 1928. At Stanford since 1927.

†CUBBERLEY, ELLWOOD PATTERSON (134) 610 Cabrillo (PA 1019)
Professor of Education, and Dean of School of Education
A.B., Indiana, 1891; A.M., Columbia, 1902, Ph.D., 1905; LL.D., Iowa, 1923. Instructor in Science, Ridgeville College (Ind.), 1891; Professor of Physical Science, Vincennes University (Ind.), 1891–93, President, 1893–96; Superintendent of City Schools, San Diego (Calif.), 1896–98; Honorary Fellow, Columbia University, 1901–2, 1904–5; Professor of Education, University of California, Summer Sessions, 1901, 1906, University of Chicago, Summer Quarter, 1910, Harvard University, second half-year, 1910–11; Visiting Professor, Columbia University, Summer Sessions, 1907, 1914, 1916, second half-year, 1915–16. At Stanford since 1898.

†Culver, George Bliss (1234) 723 Santa Ynez* (PA 1365)
Dean of Men

A.B., Stanford, 1897; LL.B., George Washington University, 1902. With Smithsonian Institution, Washington (D.C.), 1898–99; Head of Biological Department, Los Angeles High School, 1907–20. At Stanford since 1920.

Cummings, N. Florence (123) 999 Broadway, SF-sf (Prospect 6629)
Director of Social Service and Public Health Nursing, and Associate Professor of Nursing

St. Luke's Hospital Training School for Nurses (New Bedford, Mass.); Simmons College Public Health Nursing Course; Boston School of Social Work. At Stanford since 1923.

†Cuneo, Joseph Charles (123) 150 S. Fourteenth, SJ-sj (Ballard 7388)
Clinical Instructor in Medicine

B.S., Princeton, 1917; M.D., Johns Hopkins, 1922. Medical Interne, Johns Hopkins, 1922–23; Medical Resident, Allegheny General Hospital, Pittsburgh, 1923–24. At Stanford since 1927.

†Cushing, Oscar Kennedy (2) 37 Seventh Ave., SF-sf (Pacific 987)
Lecturer in Law

†Cutting, James Arthur (123) Agnew-a (Ballard 1728)
Assistant Clinical Professor of Medicine (Psychiatry)

A.B., Stanford, 1906; M.D., Cooper Medical College, 1911. Interne, Lane Hospital, 1911–12, Senior Medical Interne and House Officer, 1912–13; Assistant Physician, Agnew State Hospital, since 1913. At Stanford since 1921.

†Danforth, Charles Haskell (123) 951 Bryant, P* (PA 1596W)
Professor of Anatomy

A.B., Tufts, 1908, A.M., 1910; Ph.D., Washington University, 1912. Fellow in Biology, Tufts College, 1908, Instructor, 1910–11; Teaching Fellow in Anatomy, Harvard Medical School, 1910–11; Instructor in Anatomy, Washington University School of Medicine, 1908–14, Associate, 1914–16, Associate Professor, 1916–22. At Stanford since 1922.

Darrow, Karl Kelchner (4) Stanford Union (PA 2900)
Acting Professor of Physics

S.B., Chicago, 1911, Ph.D., 1917. University of Paris, 1911–12; University of Berlin, 1912; Assistant, University of Chicago, 1914–17; Member of Technical Staff, Bell Telephone Laboratories (formerly Western Electric Co.), since 1917.

Davenport, Herbert Joseph (4) 410 Kipling, P-p (PA 264W)
Acting Professor of Economics

Ph. B., University of South Dakota, 1894; Ph.D., Chicago, 1898. Instructor in Political Economy, University of Chicago, 1902–4, Assistant Professor, 1904–7, Associate Professor, 1907–8; Professor and Head of Department of Economics, University of Missouri, 1908–16, Dean of School of Commerce, 1914–16; Professor of Economics, Cornell University, since 1916; Professor of Economics, Columbia University, Summer Sessions, 1921–28.

†Davidson, Percy Erwin (234) Menlo Heights-*506* (MP 1243W)
Associate Professor of Education

A.B., Stanford, 1898; A.M., Harvard, 1905; Ph.D., Columbia, 1914. Teacher, Grammar and High Schools, San Diego (Calif.), 1898–1900; Supervisor of History and English Teaching, San Francisco State Normal School, 1900–1903; Assistant in Education, San Diego State Normal, 1903–4; Graduate Student, Teachers' College, Columbia University, 1905–7; Instructor in Logic and History of Education, New York Training School for Teachers, 1906–7. At Stanford since 1907.

†Davis, Albert David (123) 735 Taylor, SF-sf (Prospect 0630)
Clinical Instructor in Surgery (Plastic Surgery)

D.D.S., Creighton University, 1911; B.S., Omaha, 1919; M.D., Nebraska, 1921. Instructor in Oral Surgery, University of Nebraska, 1921–24; Graduate Work in Plastic Surgery in European Clinics. At Stanford since 1928.

†Davis, Charles Wesley (123) 1221 Middlefield, P-p (PA 3293W)
Associate Director, Department of Physical Education and Hygiene

B.P.E., Y.M.C.A. College, Springfield (Mass.), 1918, B.S., 1928. U.S. Navy, 1918; Physical Director, Madison (N.J.), 1919–21, Cleveland Heights High School, Cleveland (Ohio), 1921–22; sometime Athletic Director, Boys' Camps, Maine; Playground Instructor, Brookline (Mass.); Commissioner, Boy Scouts, Madison (N.J.); Swimming Instructor, Venice (Calif.); Supervisor, Summer Playgrounds, Los Angeles, 1924; Swimming Instructor, Y.M.C.A. College, Summer School, 1927, 1928. At Stanford since 1922.

Davis, Eleanor Southgate (4) 440 Melville, P* (PA 2105)
Acting Director of Physical Education for Women

Graduate, Boston Normal School of Gymnastics, 1907. Instructor, Randolph-Macon Woman's College, 1907–8; Supervisor, Public Schools, Gloucester (Mass.), 1908–10, Greenfield (Mass.), 1910–12; Instructor, Colorado College, 1914–19; Graduate Student, Department of Hygiene, Wellesley College, 1919–20; Director of Physical Education for Women, Colorado College, 1920–28; Assistant Professor, University of Colorado, Summer Quarter, 1927, 1928.

Davis, Gordon Arthur (1234) 565 Salvatierra-*865* (PA 3753)
Director of Dramatics, and Associate Professor of English (Public Speaking)

A.B., Stanford, 1920. At Stanford since 1920.

†Davis, Joseph Stancliffe (1234) 691 Mirada* (PA 2386J)
Director and Executive Secretary, Food Research Institute

A.B., Harvard, 1908, Ph.D., 1913. Instructor in Economics and Sociology, Bowdoin College, 1912–13; Instructor in Economics, Harvard University, 1913–17; Tutor in the Division of History, Government, and Economics, Harvard University, 1914–20; Assistant Professor of Economics, Harvard University, 1917–21; Assistant Statistician, American Shipping Mission, and Statistician of the Allied Maritime Transport Council, London, 1918–19. At Stanford since 1921.

†Davis, William Hawley (1234) 686 Lasuen (PA 2827J)
Professor of English, and Editor of University Press

A.B., Harvard, 1905; A.M., Columbia, 1908. Instructor in Public Speaking, Harvard College, Summer Sessions, 1908, 1909, and first half-year 1908–9; Professor of English and Public Speaking, Potsdam (N.Y.) State Normal School, 1909; Assistant Professor of Public Speaking, University of Kansas, 1909–10; Instructor in Public Speaking, Columbia University, Summer Sessions, 1910–12; Professor of English and Public Speaking, Bowdoin College, 1910–25. At Stanford since 1924.

†Davis, William Morris (1) Kingscote
Lecturer in Physiographic Geology

S.B., Harvard, 1869, M.E., 1870; Hon.Ph.D., Greifswald, 1903, Christiania, 1908; Hon.S.D., Cape of Good Hope, 1905, Melbourne, 1914. Assistant in Geology, Harvard, 1876, Instructor, 1877–84, Assistant Professor of Physical Geography, 1884–89, Professor, 1889–99, Sturgis Hooper Professor of Geology, 1899–1912, Professor of Geology, Emeritus, since 1912; Visiting Professor, University of Berlin, 1908–9, University of Paris, 1911–12; Lecturer, State University of Texas, 1926, University of Arizona, 1927, University of California, 1927.

Dickey, Lloyd Blackwell (1234) 2480 Washington, SF-sf
Assistant Professor of Pediatrics [(Fillmore 5885)

A.B., Fargo College, 1915; A.M., Illinois, 1917; B.S., Minnesota, 1921, M.B., 1922, M.D., 1923. Assistant in Zoölogy, University of Illinois, 1915–18; Instructor in Anatomy, University of Minnesota, 1919–21; Assistant, Puget Sound Marine Biological Station, 1921; Assistant in Medicine, University of Minnesota, 1922; Interne, State Hospital for Crippled Children, St. Paul (Minn.); Junior Interne, Lane Hospital, 1923–24, Senior Interne and Assistant in Pediatrics, 1924–25, Resident, 1925–26; Visiting Pediatrician in Tuberculosis, San Francisco Hospital, since 1927. At Stanford since 1923.

†Dickson, Ernest Charles (1234) 155 San Fernando Way, SF-sf
Professor of Public Health and Preventive Medicine [(Lockhaven 4298)

A.B., Toronto, 1904, M.B., 1906, M.D., 1917. Assistant Demonstrator in Physiology, University of Toronto, 1904–5, George Brown Research Scholar, 1906–7; Assistant Resident Physician, Johns Hopkins Hospital, 1907–8; Instructor in Pathology and Bacteriology, Cooper Medical College, 1908–10; Assistant Professor of Pathology, Stanford, 1910–13, Assistant Professor of Medicine, 1913–18, Associate Professor, 1918–23, Professor since 1923; Captain, Canadian A.M.C., February, 1918, to July, 1919. At Stanford since 1910.

†Dietrich, Waldemar Fenn (123) 694 Alvarado* (PA 3368)
Associate Professor of Mining Engineering

A.B., Stanford, 1913, Engineer, 1914. Acting Instructor in Mining, Stanford University, 1913–14; Engineer with Copper Queen Consolidated Mining Company, Bisbee (Ariz.), 1914–15; Engineer and later Assayer with Consolidated Arizona Smelting Company, Humboldt (Ariz.), 1916; Chief Efficiency Engineer, Cia. de Santa Gertrudis, Pachuca (Mexico), 1923–24; Ceramic Engineer, California State Mining Bureau, 1925–27; Consulting Ceramist, Pacatome Company, since 1927. At Stanford, 1913–14, and since 1916.

†Dillon, James Root (1234) 2670 Greenwich, SF-sf (Fillmore 3071)
Associate Clinical Professor of Surgery (Genito-Urinary)

A.B., Stanford, 1908; M.D., Cooper Medical College, 1912. Assistant in Medicine (Neurology), Stanford Medical School, 1913–14, Assistant in Surgery (Genito-Urinary) since 1915, Acting Head, Division of Urology, since 1925; Assistant Visiting Surgeon (Genito-Urinary), San Francisco Hospital, since 1917. At Stanford since 1913.

†Doane, Rennie Wilbur (123) 762 Dolores (PA 2269J)
Professor of Zoölogy

A.B., Stanford, 1896. Assistant in Zoölogy and Botany, Washington State College, 1896–99, Assistant Professor of Zoölogy and Entomology, 1899–1901; Superintendent, Fisheries Experiment Station, Keyport (Wash.), 1901–3. At Stanford since 1905.

†Dobbel, Charles Arthur (123) 1532 California, P-*1455* (PA 3651)
Assistant Professor of Mining and Metallurgy

A.B., Stanford, 1921. Assistant in Instruction, Civil Engineering, Stanford, 1918–21, Geology, Summer, 1921; Fellow in Mining and Metallurgy, Stanford, 1920–21, Acting Instructor, Spring Quarter, 1927–28. At Stanford since 1928.

†Dock, George (123) 94 N. Madison, Pasadena-p (Colorado 2678)
Lecturer in Tropical Medicine

M.D., Pennsylvania, 1884; A.M. (honorary), Harvard, 1895; Sc.D. (honorary), Pennsylvania, 1904. Interne, St. Mary's Hospital, Philadelphia, 1884–85; Assistant in Clinical Pathology and Physician to Medical Dispensary, University of Pennsylvania, 1887–88; Professor of Pathology and Clinical Medicine, Texas Medical College and Hospital, 1888–91; Professor of Medicine, University of Michigan, 1891–1908; Professor of Medicine, Tulane University, 1908–10; Professor of Medicine, Washington University, St. Louis, 1910–22.

†Dock, William (1234) 12 Commonwealth, SF-sf (Skyline 5116)
Assistant Professor of Medicine

B.S., Washington University, 1920; M.D., Rush Medical College, 1922. Medical House Officer, Peter Bent Brigham Hospital, Boston, 1922–23, Assistant Resident Physician, 1923–24; Graduate Student, First Medical Clinic, Vienna, 1924–25; Medical Resident, Lane and Stanford Hospitals, 1925–26. At Stanford since 1926.

†Dodge, John Franklin (123) 285 Atherton, Menlo Park-mp (PA 2618M)
Lecturer on Oil Land Valuation

B.S., College of Mines, University of California, 1912; M.S., University of Southern California, 1915; E.M., University of California, 1924.

†Domonoske, Arthur Boquer (123) 676 Lasuen-*2696* (PA 2824J)
Professor of Mechanical Engineering

B.S., California, 1907, M.S., 1909. Practical experience with Westinghouse Electric and Manufacturing Company, Deere and Company, C. L. Best, etc.; Instructor, University of California, 1907–10, 1911–13; Instructor, University of Illinois, 1913–15; with Holt Manufacturing Company, 1915–16; U.S.S. Board School, 1918; Assistant Professor of Mechanical Engineering, University of California, 1919–22; Chief Engineer, Doble Steam Motors Company, 1922–23; Associate Professor of Experimental Engineering, and Director of the Shops, University of California, 1923–26. At Stanford since 1926.

†Dowrie, George William (123) 421 El Escarpado-*1465* (PA 3524J)
Professor of Finance (Graduate School of Business)

A.B., Lake Forest, 1901; A.M., Chicago, 1907; Ph.D., Illinois, 1913. Fellow in Economics, University of Illinois, 1910–11, Assistant in Economics, 1911–13; Assistant Professor of Finance, University of Michigan, 1913–16, Associate Professor, 1916–17, Professor, 1917–18; Member of Staff, Guaranty Trust Company of New York, 1918; Professor of Finance, University of Minnesota, 1918–19, Dean of the School of Business, and Head of the Department of Economics, 1919–26. At Stanford since 1926.

†Duncan, William Bryan (123) 666 Kellogg, P-p (PA 2801J)
Instructor in Electrical Engineering

A.B., Stanford, 1925, Engineer, 1926. At Stanford since 1927.

Duniway, Clyde Augustus (4) 281 Embarcadero, P-*2591* (PA 1743J)
Acting Professor of History

A.B., Cornell, 1892; A.M., Harvard, 1894, Ph.D., 1897; LL.D., University of Colorado, 1914, Denver, 1914, Colorado College, 1923. Instructor in History, Harvard and Radcliffe, 1890–97; Assistant Professor of History, Stanford, 1897–99, Associate Professor, 1899–1908; President, University of Montana, 1908–12; President, University of Wyoming, 1912–17; President, Colorado College, 1917–24; Director, American University Union in London, 1923–24; Professor of History, Carleton College, since 1924; Visiting Professor of History, University of California, Summer Session, 1926.

Eberhard, Clara (123) 575 Grant, Santa Clara* (SC 549J)
Instructor in German

A.B., Stanford, 1897, A.M., 1923. At Stanford since 1923.

†Edy, John North (123) 854 Euclid, Berkeley-*1798* (Ashberry 0712)
Lecturer in Political Science (Public Management)

B.S., University of Missouri, 1905, C.E., 1909; A.M., University of California, 1927. County Highway Engineer, Butler County (Mo.); Deputy County Engineer, Yellowstone County (Mont.); Assistant City Engineer, Billings (Mont.); Highway Engineer and County Engineer, Yellowstone County (Mont.); Assistant Chief Engineer and Chief Engineer, State Highway Commission of Montana; City Manager of Berkeley, since 1923; President, International City Manager's Association, 1928.

†Eells, Walter Crosby (1234) 735 Dolores (PA 3759W)
Associate Professor of Education

A.B., Whitman College, 1908; A.M., Chicago, 1911; Ph.D., Stanford, 1927. Professor of Mathematics, Whitworth College, 1911–14; Instructor in Mathematics, U.S. Naval Academy, 1914–16; Instructor in Surveying, Harvard Engineering Camp, Summer Quarter, 1916; Professor of Applied Mathematics, Whitman College, 1916–26, Professor of Education, 1926–27; Acting Associate Professor of Education, Stanford, Summer Quarters, 1926, 1927. At Stanford since 1927.

†Ellington, Will Boyd (1234) 115 Fulton, P* (PA 3579W)
Assistant Director, Department of Physical Education and Hygiene

A.B., Stanford, 1927. At Stanford since 1927.

ELOESSER, LEO (1) 2154 Leavenworth, SF-sf (Graystone 5643)
Clinical Professor of Surgery

B.S., University of California, 1900; M.D., Heidelberg, 1907. Volunteer Assistant, Surgical Clinic, Heidelberg, 1906; Assistant, Cancer Institute, Heidelberg, 1906–7; Volunteer Assistant, Royal Surgical Clinic, Kiel, 1908 9; Volunteer Assistant, Augusta Hospital, Berlin, 1909; Assistant in Surgery, University of California, 1910–12; Surgeon to Reserve Hospital Ettlingen and Reserve Hospital III, IV, V, Karlsruhe, 1915–16; Major, M.C., U.S.A., November, 1918, to November, 1919. At Stanford since 1913.

†ELY, LEONARD W. (1234) 2161 Bryant, P-p (PA 264)
Professor of Surgery (Orthopedics)

A.B., Columbia, 1889; M.D., College of Physicians and Surgeons, Columbia University, 1895. Captain, M.C., U.S.A., September, 1917, to February, 1919. At Stanford since 1913.

†EMERSON, JAMES GORDON (1234) 636 Alvarado (PA 526M)
Associate Professor of English (Public Speaking)

B.S., Iowa State College, 1912; J.D., Stanford, 1915. Student, Harvard Law School, 1912–13, University of California Law School, Summer Session, 1914; Instructor in Public Speaking, Kansas State Agricultural College, 1915–16, Assistant Professor, 1916–17, Professor and Department Head, 1917–21. At Stanford since 1921.

†EMGE, LUDWIG AUGUSTUS (1234) 109 Edgewood, SF-sf (Lockhaven 4849)
Associate Clinical Professor of Obstetrics and Gynecology

B.S., Chicago, 1912; M.D., Rush Medical College, 1914. Assistant in Anatomy, University of Chicago, 1912–13; Special Worker in Pathology, Rush Medical College, 1913–14; Interne, Durant and Presbyterian Hospitals, Chicago, 1914–15; Resident and Assistant in Gynecology and Obstetrics, University of California Hospital, 1915–17. At Stanford since 1917.

†EMMET, BORIS (123) 1211 Middlefield, P-p (PA 2950W)
Acting Professor of Business Management (Graduate School of Business)

A.B., University of Wisconsin, 1913, A.M., 1914; Ph.D., Johns Hopkins, 1917. Field Expert, U.S. Commission on Industrial Relations, 1914; Statistical Expert and Economist, U.S. Department of Labor, 1915–17; Lecturer on Industrial Relations, University of Washington, 1918; Director of Labor, New York Dress and Waist Manufacturers' Association, 1919; Director of Labor and of Clothiers' Research Bureau, Baltimore Market, Men's Clothing Industry, 1920; Lecturer on Factory Management, Johns Hopkins University, 1922; Field Staff, U.S. Coal Commission, 1923; Labor Manager, Henry Sonneborn Company, Baltimore, Md., 1921–23, Production Manager, 1924, Works Manager, 1925–27.

†ERWIN, ERNEST S. (1234) 707 Salvatierra* (PA 3768W)
Auditor

At Stanford since 1919.

†ESPINOSA, AURELIO MACEDONIO (234) 570 Salvatierra-*1555* (PA 676J)
Professor of Romanic Languages

A.B., Colorado, 1902, A.M., 1904; Ph.D., Chicago, 1909. Assistant in Romance Languages, University of Colorado, 1901–2, Instructor, Summer Terms, 1904, 1905; Professor of Romance Languages, University of New Mexico, 1902–10; Fellow in Romance Languages and Instructor in Spanish, University of Chicago, 1908–9; Lecturer in Spanish Language and Literature, Summer Sessions, University of Chicago, 1914, University of California, 1912, 1915, 1922, 1925; Associate Editor, *Journal of American Folklore*, since 1914; Editor, *Hispania*, 1917–26; Associate Editor, *Language*, since 1925; Member of Advisory Editorial Board of *Inter-America*, since 1917; Corresponding Member of the Royal Spanish Academy, 1921; Corresponding Member of the Real Academia Hispano-Americana de Ciencias y Artes, 1921; Comendador con Placa de la Orden de Isabel la Católica, 1922; President of the American Folklore Society, 1924, 1925. At Stanford since 1910.

ESPINOSA, AURELIO MACEDONIO, JR. (123) 570 Salvatierra-*1555* (PA 676J)
Instructor in Romanic Languages

A.B., Stanford, 1927, A.M., 1928. Assistant in Instruction, Romanic Languages, Stanford, 1926–28. At Stanford since 1926.

EVERMANN, BARTON WARREN (123) *2715* Woolsey, Berkeley-b (B 3530)
Lecturer in Zoölogy

B.S., Indiana, 1886, A.M., 1888, Ph.D., 1891, LL.D., 1928; LL.D., University of Utah, 1922. Professor of Biology, Indiana State Normal School, 1886–91; Member, International Fur Seal Commission, 1892; Ichthyologist, 1891–1903; Assistant in Charge, Scientific Inquiry, 1903–10; Vice-President, Board of Education, District of Columbia, 1906–10; Member, International Fisheries Commission, 1908–9; Chief, Alaska Fisheries Service, U.S. Bureau Fisheries, 1910–14; Lecturer, Stanford, 1893–94, Cornell, 1900–1903, Yale, 1903–6; Director of Museum, California Academy of Sciences, since 1914, Director of Aquarium, since 1922; Chairman, Section on Scientific Research, Commonwealth Club of California, since 1917.

†FABER, HAROLD KNIEST (123) 2080 Vallejo, SF-sf (Fillmore 3848)
Professor of Pediatrics

A.B., Harvard, 1906; M.D., Michigan, 1911. Medical Interne, New York Hospital, 1911–13; Resident Pathologist, Babies' Hospital, New York, 1913–14; Fellow, Rockefeller Institute, New York, 1914–15; Captain, M.C., U.S.A., February 1918 to August 1919. At Stanford since 1915.

†FAGAN, ELMER DANIEL (123) 519 Tennyson, P-p (PA 2497M)
Acting Associate Professor of Economics

A.B., Oklahoma, 1920; A.M., Harvard, 1921, Ph.D., 1926. Instructor in Economics, University of Southern California, 1921–22, Assistant Professor, 1923–24, Associate Professor, 1925–26, Professor, 1927–28; Visiting Professor of Economics, University of Virginia, Summer Quarter, 1928.

†FARMER, EDWARD MCNEIL (123) 377 Everett, P* (PA 2763W)
Instructor in Education (Graphic Art)

A.B., Stanford, 1923, A.M., 1926. At Stanford since 1923.

†FARNSWORTH, PAUL RANDOLPH (123) 851 Homer, P-*831* (PA 1904W)
Assistant Professor of Psychology

A.B., Ohio State University, 1921, A.M., 1923, Ph.D., 1925. Assistant in Psychology, Ohio State, 1920–22, Special Assistant, Summer, 1922, Instructor, 1922–24; Student, University of Missouri, Summer, 1923; University Fellow, Ohio State, 1924–25. At Stanford since 1925.

FAST, LISETTE EMERY (1234) 528 Lincoln, P* (PA 1962W)
Secretary, Citizenship, and Public Exercises Committee

A.B., Stanford, 1919; M.B.A., University of Washington, 1921. Research Assistant, Food Research Institute, Stanford, 1922–23. At Stanford, 1922–27, and since 1928.

FAYLE, JANE (1234) 539 Cowper, P* (PA 682J)
Secretary to Dr. Storey

At Stanford since 1927.

FEARING, FLORA MAY (MRS.) (4) Stanford University
Acting Instructor in Political Science and Public Health Nursing

A.B., Stanford, 1917, A.M., 1918. Instructor in Political Science, Vassar College, 1918–19; Supervisor, Neuro-Psychiatric Cases, American Red Cross, Louisville (Ky.), 1920; Director, Psychiatric Social Investigation, Cincinnati Mental Hygiene Survey, National Committee for Mental Hygiene, 1921; Acting Instructor in Political Science, Stanford, Spring Quarter, 1921–22; Lecturer in Economics and Sociology, Mills College, 1922–23; Instructor in Citizenship, Stanford, 1923–26; Instructor in Political Science, Ohio State, 1926–28; Research Associate, Northwestern, since 1928.

FENNER, WILMA EDA (4) 1010 Forest, P-p (PA 517J)
Acting Instructor in Physical Education for Women

A.B., Stanford, 1927, A.M., 1928. Acting Instructor in Physical Education, Stanford, Summer Quarter, 1928; Instructor in Ancient Languages, University of Utah, 1928–29.

†Ferris, Gordon Floyd (23) 667 Melville, P* (PA 2090)
Associate Professor of Zoölogy

A.B., Stanford, 1916, A.M., 1918. Fellow of the Guggenheim Memorial Foundation (traveling in Mexico), 1925–26. At Stanford since 1916.

Field, John, II (123) 1628 Emerson, P* (PA 2725J)
Instructor in Physiology

A.B., Stanford, 1923, A.M., 1924, Ph.D., 1928. Assistant in Chemistry, Stanford, 1923–24, Food Research Fellow, 1924–25. At Stanford since 1923.

†Fish, John Charles Lounsbury (123) 308 Lincoln, P* (PA 1266)
Professor of Civil Engineering

C.E., Cornell, 1892. Instructor in Civil Engineering, Cornell University, 1892–93; Division Engineer, Lake Shore & Michigan Southern Railway (New York Central Line West), 1906–8. At Stanford since 1893.

†Fisher, Arthur Lawrence (123) 3333 Jackson, SF-sf (Fillmore 3620)
Associate Clinical Professor of Surgery (Orthopedics)

B.S., California, 1896; M.D., Johns Hopkins, 1900. Resident House Officer, Johns Hopkins Hospital, 1900–1901; Fellow, Rockefeller Institute for Medical Research, 1901–2; Assistant Visiting Surgeon, Mount Zion Hospital, San Francisco, 1902–7; Assistant in Surgery, Lane Hospital, 1907–12; Assistant in Orthopedics, Stanford Medical School, 1912–16; Instructor in Orthopedic Surgery, University of California, 1916–19. At Stanford 1912–16, and since 1920.

†Fisher, Harold Henry (123) 473 Embarcadero, P* (PA 2364W)
Lecturer in History

A.B., Vermont, 1911. Master, The Black Hall School, 1912, Mercersburg Academy, 1912–14, The Hill School, 1914–17; Student, Summer Sessions, Columbia University, 1914, Dartmouth College, 1916; First Lieutenant, Field Artillery, 1917, Captain (A.E.F.), 1918–19; on staff of *New Republic* and *Washington* (D.C.) *Herald*, 1919–20; with American Relief Administration since 1920, Chief of Department of History and Publications, 1921–24, Curator of Archives, 1924. At Stanford since 1924.

†Fisher, Walter Kenrick (12) 844 Laurel, Pacific Grove-pg (Monterey 407W)
Professor of Zoölogy, and Director of Hopkins Marine Station

A.B., Stanford, 1901, A.M., 1903, Ph.D., 1906. Assistant, U.S. Biological Survey, 1897–1901, 1903; Assistant, U.S. Fish Commission, 1902, 1904. At Stanford since 1902.

†Fletcher, Harold Augustus (123) 12 West Clay Park, SF-sf (Evergreen 7230)
Assistant Clinical Professor of Surgery (Otology, Rhinology, Laryngology)

B.S., California, 1912; M.D., Stanford, 1916. Interne, Lane Hospital, 1916–17; M.R.C., U.S.A., 1917–19. At Stanford since 1919.

†Fluhmann, C. Frederic (234) 2400 Webster, SF-sf (Walnut 0652)
Associate Professor of Obstetrics and Gynecology

B.A., University of Bishop's College, 1917; M.D., C.M., McGill, 1922. Junior Interne, Montreal General Hospital, 1922–23, Senior Interne, Gynecology, 1923–24; Johns Hopkins Hospital, Obstetrics, 1924–25. At Stanford since 1926.

Fordyce, Elizabeth L. (1234) 583 Alvarado (PA 1505W)
Assistant Secretary to the President

B.S., Mills, 1916. At Stanford since 1920.

†Foster, Benjamin Oliver (123) 574 Lasuen-*946* (PA 1021W)
Professor of Classical Literature

A.B., Stanford, 1895; A.M., Harvard, 1897, Ph.D., 1899. Parker Fellow of Harvard University, studying in the American School of Classical Studies in Rome,

1899–1900; Acting Professor of Latin and Greek, State Normal College of Michigan, 1900–1901; Assistant Professor of Latin, University of California, Summer Session, 1908, Associate Professor, 1923; Visiting Professor of Latin, University of Chicago, Autumn and Winter Quarters, 1925–26, Summer Quarter, 1928. At Stanford since 1901.

FRANÇON, MARCEL (4) Stanford Union (PA 2900)
Acting Instructor in Romanic Languages

Licencié-ès-sciences, Lyon, 1921; A.M., Harvard, 1925, Ph.D., 1929. Instructor in French, Harvard University, 1927–28.

†FRANKLIN, EDWARD CURTIS (12) 663 Mirada (PA 216)
Professor of Organic Chemistry

B.S., Kansas, 1888, M.S., 1890; Ph.D., Johns Hopkins, 1894; Sc.D., Northwestern, 1925, Western Reserve, 1926; LL.D., Wittenberg, 1927. Chemist to Palo Alto Plantation and Sugar Factory, Donaldsville (La.), 1888; Chemist to Bella Vista Mining and Milling Co., Los Quemados, Costa Rica, 1897; Instructor in Chemistry, University of Kansas, 1888–90; Student, University of Berlin, 1890–91; Assistant in Chemistry, University of Kansas, 1891–93, Associate Professor, 1894–99, Professor of Physical Chemistry, 1899–1903; Member of the U.S. Assay Commission, 1907; Chief of the Division of Chemistry, U.S. Public Health Service, Washington (D.C.), 1911–13; Member Advisory Board, Bureau of Mines, Washington (D.C.), 1917–18; Physical Chemist, Bureau of Standards, 1918; Consulting Chemist, Ordnance Bureau, 1918; President, American Chemical Society, 1924; Nichols Medal in Chemistry, 1925. At Stanford since 1903.

†FRENCH, DELBERT RANSOM (123) 453 Princeton, M-*2006* (PA 2117R)
Instructor in Citizenship

A.B., Reed College, 1915; A.M., Wisconsin, 1920. At Stanford since 1927.

†FRIEND, WILL A. (1234) 1026 Forest Court, P-*3001* (PA 1884R)
Manager of the University Press

At Stanford since 1920.

†GARDNER, DAVID CHARLES (123) 514 Alvarado-*115* (PA 1068)
Chaplain, and Lecturer on Biblical History and Literature

Graduate, Church Divinity School of the Pacific, 1897, D.D., 1920. Curate, St. James Mission, San Francisco, 1898; Rector of All Saints Church, Palo Alto, 1898–1902. At Stanford since 1902.

†GARLAND, LEO HENRY (123) 60 Rico Way, SF-sf (Fillmore 5112)
Clinical Instructor in Medicine (Radiology)

M.D., University College (Dublin), 1924. At Stanford since 1928.

GAY, GEORGE INNESS (1234) 2341 South Court, P-*73* (PA 601M)
Economist, Hoover War Library

B.S., Colorado, 1909, C.E., 1912. Assistant in Mathematics, Colorado, 1906–9, Instructor in Civil Engineering, 1909–10; Instructor in Civil Engineering, Illinois, 1910–11; Instructor in Civil Engineering, California, 1911–15. At Stanford since 1929.

GENTRY, GEORGE VINCENT (*23*) 219 Ramona, P* (PA 418J)
Acting Instructor in Philosophy

A.B., Arizona, 1926. Scholar in Philosophy, University of Chicago, 1926–27, Assistant in Philosophy, 1927–28.

GIANINI, LEO GREGORY (23) 534A Sixth Ave., SF-sf (Skyline 0336)
Lecturer in Electrical Engineering

A.B., Stanford, 1921.

†GIBBONS, MORTON RAYMOND (123) 3979 Washington, SF-sf
Lecturer on Medical Aspects of Insurance [(Bayview 7950)

M.D., Cooper Medical College, 1897. Instructor in Clinical Medicine, Cooper Medical College, 1904–9; Medical Director, Industrial Accident Commission of Cali-

fornia, since 1914; Captain and Major, U.S.R., 1917–19; C.O., Base Hospital, Camp Pike, 1918–19; Lieutenant Colonel, M.C., U.S.R.; C.O., General Hospital 138. At Stanford 1909–16, and since 1919.

GIBSON, ETTA (1234) Menlo Heights* (PA 1243M)
Recording Secretary, Registrar's Office
At Stanford since 1925.

†GILMAN, PHILIP KINGSNORTH (1234) 1803 Broadway, SF-sf
Clinical Professor of Surgery [(Ordway 4578)
A.B., Stanford, 1901; M.D., Johns Hopkins, 1905. Assistant Resident Surgeon, Johns Hopkins Hospital, 1905–7; Assistant Professor of Pathology, Philippine Medical School, 1907–8; Assistant Professor of Surgery, College of Medicine and Surgery, University of the Philippines, 1908–12, Professor of Surgery and Chief of Department, 1912–16; Chief Surgeon, Philippine General Hospital, 1912–16; Lieutenant, M.C., U.S.N.R.F., December 1917 to February 1919; Lieutenant Commander, 1925. At Stanford since 1916.

GIRARD, FRANK ROBERT (13) Bohemian Club, SF-sf (Franklin 2441)
Lecturer in Surgery
M.D., California, 1903. Volunteer Assistant Koenigliches Krankenhaus, Berlin, Germany, 1905–6; House Pathologist and House Surgeon, St. Luke's Hospital, New York, 1906–8; Assistant Resident Physician, Sloane Maternity Hospital, New York, 1908–9; Assistant Clinical Professor of Gynecology, Stanford, 1916–25; Major, M.C., U.S.A., December 1917 to November 1919; Attending Surgeon, San Francisco Hospital, since 1925. At Stanford since 1914.

GODE, LOUISE (4) 538 Alvarado-*816* (PA 4008)
Acting Instructor in German
Teacher's Diploma, Bremen, 1923. Instructor in German, Barnard College, since 1924; Instructor in German, Mt. Holyoke, Summer Quarter, 1928.

GOESLE, ALVA I. (MRS.) (1234) 1160 Greenwood, P* (PA 2295W)
Recorder, Physical Education and Hygiene for Men
At Stanford since 1926.

[§GOLDER, FRANK ALFRED
Professor of History]
A.B., Harvard, 1903, Ph.D., 1909. Instructor in History, University of Missouri, 1908–9, in History and Economics, Boston University, 1909, in History, University of Chicago, 1910; Assistant Professor of History, State College of Washington, 1910–14, Professor, 1915–20; Investigator in Russian Archives for Carnegie Institution, Washington (D.C.), 1914–15, for Carnegie Institution and American Geographical Society, 1917; Researches for U.S. Government in connection with the War, 1917–18. At Stanford since 1921.

†GORDAN, RICHARD A. (123) 159 Churchill, P* (PA 2805J)
Associate Professor of Military Science and Tactics
Graduate, Field Artillery School, Fort Sill (Okla.), 1922; Graduate, French Cavalry School, Saumur (France), 1923. Instructor, Field Artillery School, Fort Sill (Okla.), 1924–28; Captain, Field Artillery, U.S. Army. At Stanford since 1928.

†GOTTBRATH, NORBERT J. (123) Ralston Road, Belmont-b (Belmont 111)
Assistant Clinical Professor of Medicine (Neurology)
B.S., St. Mary's Institute (Dayton, O.), 1898; M.D., Georgetown University, 1912. Clinical Assistant, Neurological Institute, New York City, 1914–15; Attending Physician and Instructor, Vanderbilt Clinic, 1914–16; Director of Prison Survey, California Branch of American Institute of Criminal Law and Criminology, 1919–21. At Stanford since 1918.

§ Deceased, January 7, 1929.

GRAHAM, HARRINGTON BIDWELL (123) Olympic Club, SF-sf (Prospect 4400)
Associate Clinical Professor of Surgery (Otology, Rhinology, and Laryngology)

B.S., California, 1896, M.D., 1899. Superintendent of Waldeck Sanitarium, 1899; Assistant in Surgery, San Francisco Polyclinic, 1904; Assistant, Ear, Nose, and Throat Clinic, Cooper Medical College, 1910–11; Lieutenant, U.S.N.R.F., September 1918 to February 1919. At Stanford since 1912.

†GRANT, EUGENE LODEWICK (3) 1236 College, M-*842* (PA 3072W)
Acting Associate Professor of Civil Engineering

B.S., Wisconsin, 1917, C.E., 1928; A.M., Columbia, 1928. Instructor in Civil Engineering, Montana State College, 1920, Assistant Professor, 1920–28, Associate Professor, 1928–29.

†GRAY, HENRY DAVID (4) 612 Alvarado (PA 1923R)
Professor of English

Ph.B., Colgate, 1897; A.M., Columbia, 1898, Ph.D., 1904; Litt.D., Colgate, 1919. Assistant in German and French, Colgate Academy, 1896–97; University Scholar, Columbia University, 1898–1900; Instructor in Dramatic Literature, American Academy of Dramatic Arts, 1900–1902; Instructor in English, University of Texas, 1902–5; Lecturer in English, Columbia University, Summer Session, 1905, University of Oregon, Summer Session, 1910, University of Illinois, Summer Session, 1912, University of Iowa, Summer Session, 1922, University College, University of London, Michaelmas Term, 1922, Brigham Young University, Summer Session, 1925. At Stanford since 1905.

†GREEN, BOYNTON MORRIS (123) 691 Salvatierra (PA 3082J)
Assistant Professor of Mechanical Engineering

A.B., Stanford, 1914, Engineer, 1916. Student Engineer, H. Koffers Company, Pittsburgh (Pa.), 1916; Draftsman and Construction Engineer, Federal Telegraph Company, 1917, 1919–21. At Stanford 1920, and since 1921.

†GREEN, HERLWYN, RUGGLES (123) 1121 Emerson, P-p (PA 1214)
Acting Instructor in Anatomy

A.B., Brown University, 1897, A.M., 1898; M.D., University of Pennsylvania, 1903. Medical Corps, U.S.A., 1898–99; Captain, Medical Corps, U.S.A., A.E.F., 1917–19.

GRIFFING, ELIZABETH PERRY (MRS.) (1234) 792 Santa Maria (PA 2407)
Junior Research Associate, Food Research Institute

B.S., Simmons, 1914; A.M., Stanford, 1920. At Stanford since 1920.

†GUÉRARD, ALBERT LÉON (234) 635 Gerona-*1663* (PA 3005)
Professor of General Literature

A.B., Classical, University of Paris, 1898, A.B., Modern, 1899, Agrégé d'Anglais, 1906. Junior Professor of French Literature and Examiner in History, State Normal School, Paris, 1904–6; Professor of English, École des Hautes Études Commerciales, Paris, 1904–6; Instructor in French, Williams College (Mass.), 1906–7; Assistant Professor of French, Stanford, 1906–13, Associate Professor, 1913; Professor of French Civilization and Head of Romance Language Department, Rice Institute, 1913–24; Professor of French and Chairman of French Department, University of California, Southern Branch, 1924–25; Professor of French, University of Chicago, Summer, 1916, 1920, University of California, Southern Branch, Summer, 1921, 1922, 1926, University of Wisconsin, Summer, 1923. At Stanford, 1906–13, and since 1925.

†GULLIKSON, ALBERT CLARENCE (123) 666 Hawthorne, P-*10* (PA 2714M)
Instructor in Mechanical Engineering

B.S., University of Washington, 1924. Apprentice, Machinist, and Draftsman with several firms in the Northwest, 1915–24; Instructor and Head of the Department of Industrial Arts, Highline High School, Seattle (Wash.), 1924–27; Instructor in Mechanical Engineering, University of Cincinnati, 1927–28. At Stanford since 1928.

†Gunn, Herbert (23) 163 Twenty-sixth Ave., SF-sf (Evergreen 4619)
Lecturer in Tropical Medicine

M.D., Cooper Medical College, 1895.

†Haas, Sylvan Lewis (123) 579 Eleventh Ave., SF-sf (Skyline 8713)
Assistant Clinical Professor of Surgery

B.S., University of California, 1904; M.D., Johns Hopkins Medical School, 1908. Resident Pathologist, Lakeside Hospital, Cleveland (Ohio), 1908–9; Assistant Surgeon, Shriners' Hospital, San Francisco, since 1923. At Stanford 1912–18, and since 1923.

Hadden, Elizabeth (1234) 151 Kellogg, P-p (PA 734W)
Chief of Order Division, Library

At Stanford since 1901.

Haley, Bernard Francis (12) 638 Salvatierra (PA 3985W)
Assistant Professor of Economics

A.B., Stanford, 1922, A.M., 1923; A.M., Harvard, 1926. Scholar in Economics, Harvard, 1923–24, Fellow, 1925–26. At Stanford, 1924–25, and since 1926.

†Hall, Howard Judson (1234) University Ave., Los Altos-*846* (LA 171W)
Associate Professor of English

B.S., Michigan State College, 1890; A.B., Stanford, 1896; A.M., Harvard, 1900. Professor of English, and Librarian, University of Arizona, 1891–1904; Instructor, Army Educational Corps, A.E.F., University, Beaune, Côte d'Or, France, 1919. At Stanford since 1904.

†Hall, James Kendall (123) 445 El Escarpado-*55* (PA 3636)
Instructor in Citizenship

A.B., University of Oregon, 1925, A.M., 1926; Ph.D., Stanford, 1929. Graduate Student, University of California, Summer Quarter, 1926; Instructor in Economics, Pomona, 1926–27; Acting Instructor in Citizenship, Stanford, 1927–28. At Stanford since 1927.

Hall, Victor Ernest (123) 735 Middlefield, P* (PA 257W)
Instructor in Biology (Physiology)

A.B., Stanford, 1922, A.M., 1925, M.D., 1928. At Stanford since 1925.

§Hallberg, Laura Sanford (Mrs.) (123)
Secretary to Dean of School of Medicine

A.B., Stanford, 1917. At Stanford since 1922.

Handy, Etta Howes (1234) 671 Santa Ynez-*869*
Director of Dining Halls, Women's Dormitory, and Stanford Union

B.S., Washington State College, 1921. Head Institutional Economics, Washington State College, 1918–21. At Stanford since 1921.

Hansen, Hazel Dorothy (1234) 513 Salvatierra-*2442* (PA 1025)
Instructor in Classical Literature

A.B., Stanford, 1920, A.M., 1921, Ph.D., 1926. Student, American School of Classical Studies, Athens (Greece), 1922–25, 1927–28, Fellow in the School, 1923–24, Holder of Alice Freeman Palmer Fellowship, 1927–28. At Stanford since 1928.

†Hanzlik, Paul John (1234) 819 Prospect Row, San Mateo-sm (SM 1117)
Professor of Pharmacology

Ph.C., Iowa, 1908; A.B., Illinois, 1908, A.M., 1911; M.D., Western Reserve, 1912. Demonstrator in Pharmacology, Western Reserve University, 1912–13, Instructor, 1913–15, Associate, 1915–17, Assistant Professor, 1917–20, Associate Professor, 1920–21; Pharmacological Institute and Physico-Chemical-Biological Institute, University of Vienna, 1913–14; Pharmacologist, Bureau of Mines, Department of Interior, and Captain, M.C., U.S.A., 1918. At Stanford since 1921.

§ Deceased, April 14, 1929.

†Harcourt, Robert Henry (123) 918 Cowper, P-p (PA 1467J)
Teaching Specialist in Forge Practice

Graduate, Santa Barbara State Normal School, 1917. Apprentice and Blacksmith with Risdon Iron Works, San Francisco, 1898–1901, 1903–4; with Hammond Car and Elevator Company, San Francisco, 1901–2, 1904–5; with National Iron Works, San Francisco, 1902–3; Toolman with Abner Doble Steel Company, San Francisco, 1905–6, Foreman of Forge Shop, 1906–7; Instructor in Machine Shop Practice, Forge Practice, and Sheet Metal Work, State Normal School, Santa Barbara, Summer Session, 1919. At Stanford since 1907.

†Harriman, Raymond Davis (123) 530 Harvard, M-*1913* (PA 3735W)
Associate Professor of Classical Literature

A.B., Grinnell College, 1909; A.M., Wisconsin, 1914, Ph.D., 1915. Fellow in Latin, University of Wisconsin, 1913–14, Assistant in Ancient History, 1914–15; Fellow in American Academy in Rome, 1915–16; Instructor in Ancient Languages, University of Utah, 1916–17, Assistant Professor, 1917–22, Associate Professor, 1922–28, Acting Dean of Men, 1926–28; Visiting Assistant Professor of Latin, University of Chicago, 1925–26, Visiting Associate Professor, Summer Quarter, 1927; Lecturer in Ancient History, University of Wisconsin, Summer Session, 1926. At Stanford since 1928.

†Harrington, Charles Henry (123) 461 Homer, P-p (PA 1442W)
Instructor in Mathematics

A.B., Stanford, 1925, A.M., 1925. At Stanford since 1927.

†Harrington, Edward Wentworth (123) 152 Vaughn, SJ*
Acting Instructor in Citizenship [(Ballard 5828J)]

A.B., Stanford, 1920; A.M., California, 1922. High School Teacher, 1921–24; Assistant Professor of Education and Teacher Training, San Jose State Teachers College, 1925–27.

†Harrison, George Russell (123) 622 Salvatierra* (PA 2414)
Associate Professor of Physics

A.B., Stanford, 1919, A.M., 1920, Ph.D., 1922. Instructor in Physics, Stanford, 1919–23; Associate Physicist, Bureau of Standards, Summer, 1921; National Research Fellow in Physics, Harvard, 1923–25. At Stanford 1919–23, and since 1925.

†Hartman, George Washington (123) 1246 Sacramento, SF-sf
Lecturer on Genito-Urinary Surgery

B.S., California, 1903; M.D., Johns Hopkins, 1908. Resident Physician, French Hospital, New York, 1908, Flushing Hospital, New York, 1909; Adjunct in Urology, German Hospital, 1909–18; Urologist, Franklin Hospital, San Francisco, 1918; Assistant, Urological Clinic, San Francisco Polyclinic, 1912–18; Chief of Clinic, San Francisco Polyclinic, 1918. At Stanford since 1919.

[†Hashimoto, Tadaichi 110 Seventh, Pacific Grove-pg (Monterey 814)
Research Chemist (Jacques Loeb Laboratory)]

Hays, Alice Newman (12) 526 Alvarado* (PA 1052J)
Reference Librarian

A.B., Stanford, 1896; B.L.S., New York State Library School, 1903. Assistant, Home Education Department, New York State Library, 1901. At Stanford since 1901.

Hays, Harford Holmes (123) 825 University, P-p (PA 3180W)
Instructor in English

A.B., Stanford, 1924, A.M., 1927. Assistant in Instruction, Stanford, 1924–27. At Stanford since 1924.

†Heath, Harold (234) 181 Ocean View, Pacific Grove-pg (PG 1808R)
Professor of Zoölogy

A.B., Ohio Wesleyan, 1893; Ph.D., Pennsylvania, 1898; D.Sc., Ohio Wesleyan, 1919. Assistant in Biology, Ohio Wesleyan University, 1891–93; Professor of Biology, University of the Pacific, 1893–94; Harrison Fellow in Zoölogy, University of Pennsylvania, 1896–98. At Stanford since 1894.

†Heath, Harrison French (4) 260 S. Fifteenth, San Jose-sj
Acting Assistant Professor of Education [(Ballard 2027R)

B.S., University of Washington, 1916, A.M., 1921. Head of Mathematics Department, Chehalis (Wash.) High School, 1916–17; Supervising Principal of Grades, Chehalis, 1917–18; Principal, Renton (Wash.) High School, 1919–20, Sedro-Woolley (Wash.) High School, 1920–22; Superintendent of Schools, Burlington (Wash.), 1922–26; Assistant Professor of Mathematics, San Jose State Teachers College, since 1926.

Helvenston, Harold Finley (1234) Stanford Union-*2182* (PA 2900)
Instructor in English (Public Speaking), and Technical Director of Dramatics

Certificate, Yale University School of the Fine Arts, Department of the Drama. Student, Art Institute of Chicago, 1921–22, 1924; Art and Technical Director, University Players, Southampton, L.I., Season, 1927; Designer of Stage Settings for Connecticut College, New London (Conn.), and Amateur Comedy Club of New York City. At Stanford since 1928.

[†Herre, Albert W. C. T. 211 Alexander, Los Gatos-lg (LG 457J)
Curator of the Zoölogical Museum]

A.B., Stanford, 1904, A.M., 1905, Ph.D., 1909. Assistant in Zoölogy, Stanford, 1903–4; Professor of Biology, University of Nevada, 1909–10; Professor of Geography, Washington State Normal, 1915–17, Professor of Biology and Hygiene, 1917–20; Chief, Division of Fisheries, Bureau of Science, Manila (P.I.), 1920–28. At Stanford since 1928.

†Hesthal, Cedric Edward (123) 762 Homer, P-p (PA 2033)
Instructor in Physics

A.B., Stanford, 1924, A.M., 1928. Teaching Assistant in Physics, Stanford, 1925–26, Summer Quarter, 1928. Research Fellow, 1926–27. At Stanford since 1928.

†Hill, Harold Phillips (1) 3625 Jackson, SF-sf (Bayview 7716)
Clinical Professor of Medicine

A.B., Stanford, 1898; M.D., California, 1901. Assistant in Physiology, Department of Medicine, University of California, 1899–1901, Instructor, 1901–3; Assistant Visiting Physician, St. Luke's Hospital, 1903–6, Visiting Physician, 1906–20; Chief of Staff, St. Luke's Hospital. At Stanford since 1912.

†Hill, Henry Granville (3) 465 S. Fifteenth, San Jose-sj
Lecturer in Law [(Ballard 1863)

A.B., Stanford, 1909, J.D., 1911.

†Hinkle, George (1234) Harvard, MP-*2335* (MP 3019)
Instructor in English

A.B., Stanford, 1925, A.M., 1928. At Stanford since 1927.

Hitchcock, Jeannette McCrory (1234) 513 Salvatierra-*1287* (PA 1025)
Cataloguer, Library

A.B., Stanford, 1915; B.S. in L.S., University of Washington, 1918. Branch Librarian, South Tacoma Branch, 1918–19; First Assistant Cataloguer, Tacoma Public Library, 1919–22. At Stanford since 1923.

Hobe, Adelaide M. (1234) Harvard, MP* (MP 801J)
Junior Statistical Associate, Food Research Institute

At Stanford since 1922.

†Holbrook, Evans (4) 634 Alvarado* (PA 526W)
Acting Professor of Law

A.B., Stanford, 1897; LL.B., Michigan, 1900. Attorney at Law, Chicago, 1900–1905; Instructor in Law, Michigan, 1905–7, Assistant Professor, 1907–10, Professor since 1910; Professor of Law, University of California, 1918–19; Acting Professor of Law, Stanford, Summer Quarter, 1923, University of California, Summer Session, 1925, Columbia University, Summer Session, 1927.

†Holden, Paul Eugene (123) 640 Seneca, P* (PA 3613)
Professor of Industrial Management (Graduate School of Business)
B.S., Purdue, 1915. With E. C. Atkins & Co., Indianapolis, Ind., 1915-17; Captain, Ordnance Dept., U.S. Army, 1917–19; Production Manager, Canadian plant, E. C. Atkins & Co., at Hamilton, Ontario, 1919–20; Assistant Production Manager, Remington Typewriter Company, Ilion, N.Y., 1920–21; Engineer, Library Bureau, Ilion, 1921–22; Assistant Manager, Department of Manufacture, U.S. Chamber of Commerce, 1922–26. At Stanford since 1926.

Hollands, Sarah Truair (234) 1143 Fulton, P* (PA 2716W)
Medical Clerk, Student Health Service
A.B., Mt. Holyoke, 1903. At Stanford since 1928.

†Holman, Emile Frederic (1234) 112 Walnut, SF-sf (Walnut 4849)
Professor of Surgery
A.B., Stanford, 1911; B.A., Oxford, 1916; M.D., Johns Hopkins, 1918. Casualty House Surgeon, Radcliffe Infirmary, Oxford, 1916–17; Resident Medical Officer, Children's Hospital, Baltimore, 1918–19; Research Fellow, Hunterian Laboratory of Experimental Surgery, 1918–19; Assistant Resident Surgeon, Johns Hopkins Hospital, 1919–21, Resident Surgeon, 1921–23; Instructor in Surgery, Johns Hopkins Medical School, 1920–23; Resident Surgeon, Peter Bent Brigham Hospital, Boston, 1923–24; Austin Teaching Fellow, Harvard Medical School, 1923–24; Assistant Professor of Surgery, Western Reserve University Medical School, 1924–25; Attending Surgeon, Lakeside Hospital, Cleveland, 1924–25. At Stanford since 1925.

†Hoover, Theodore Jesse (123) 627 Salvatierra* (PA 2365)
Professor of Mining and Metallurgy, and Dean of the School of Engineering
A.B., Stanford, 1901. Assayer, Superintendent, Manager, Consulting Engineer, Managing Director, Director, and President of many mining companies in America, Europe, Asia, Africa, and Australia, 1901–19. At Stanford since 1919.

†Hosford, George Newton (4) 31 Shore View, SF-sf (Evergreen 8462)
Clinical Instructor in Surgery
A.B., California, 1918, M.D., 1923. Assistant in Surgery (Ophthalmology), University of California, 1923–26, Instructor, 1926–29. At Stanford since 1929.

†Hotchkiss, Willard Eugene (123) 450 El Escarpado* (PA 2556)
Dean of Graduate School of Business
Ph.B., Cornell, 1897, A.M., 1903, Ph.D., 1905; LL.D., Northwestern, 1927. Instructor in Political Science, University of Pennsylvania, 1904–5; Assistant Professor of Economics, Northwestern University, 1905–7, Associate Professor, 1907–9, Professor, 1909–17, 1921–25, Dean, School of Commerce, 1908–17; Professor of Economics and Director of Business Education, University of Minnesota, 1917–19; Acting Professor of Political Science, Stanford University, 1915–16, University of California, Summer Session, 1916; War Labor Counselor, Inland Empire Logging Camps, 1917–18; Secretary, Shipbuilding Labor Adjustment Board, 1918–19; Secretary, President's Industrial Conference, 1920; Executive Director, National Industrial Federation of Clothing Manufacturers, 1920–25; Educational Adviser, Institute of American Meat Packers, 1923; Research Staff, U.S. Coal Commission, 1923. At Stanford since 1925.

†Hotelling, Harold (123) 586 Foothill Road* (PA 3949W)
Associate Professor of Mathematics
A.B., University of Washington, 1919. M.S., 1921; Ph.D., Princeton, 1924. University Scholar, University of Chicago, Summer Quarter, 1920; Assistant in Mathematics, University of Washington, 1920–21; J.S.K. Fellow in Mathematics, Princeton University, 1921–22, Instructor, 1922–24; Junior Research Associate, Food Research Institute, Stanford, 1924–25, Research Associate, 1925–27. At Stanford since 1924.

†Huggins, Maurice Loyal (123) 600 Foothill Road (PA 3949J)
Assistant Professor of Chemistry
A.B., B.S., California, 1919, M.S., 1920, Ph.D., 1922. Assistant in Chemistry, California, 1919–20, University Fellow in Chemistry, 1920–21, du Pont Fellow,

1921–22; National Research Fellow in Chemistry, Harvard, 1922–23; California Institute of Technology, 1923–25. At Stanford since 1925.

†Hulme, Edward Maslin (123) 638 Channing, P-p (PA 399M)
Professor of History

A.B., Stanford, 1897; A.M., Cornell, 1902. University Scholar, Harvard University, 1900–1901; Cornell Traveling Scholar at Collège de Sorbonne, 1902; Student in Europe, 1919–20; Instructor in Literature and History, High School, Portland (Ore.), 1897–1900; Assistant Professor of History, University of Idaho, 1902–5, Associate Professor, 1905–6, Professor, 1906–21, Dean of College of Letters and Science, 1917–21; Acting Professor of European History, Stanford University, Winter Quarter, 1918; Professor of European History, University of California, Summer Session, 1918, University of Chicago, 1919, University of Oregon, Summer Session, 1925, 1926. At Stanford since 1921.

†Hunt, Ernest Paul (123) 127 Harriet, P-p (PA 4072)
Director of Basketball and Freshman Sports

A.B., Indiana, 1913. Assistant in Physical Education, Indiana University, 1910–13; Director of Physical Education, Linton (Ind.), 1913–14, Monte Vista (Colo.), 1914–16; Supervisor of Physical Education, Waco (Tex.) Public Schools, 1916–18, Berkeley High School, 1918–21. At Stanford since 1922.

†Hurwitz, Samuel H. (123) 2659 Filbert, SF-sf (Walnut 4422)
Assistant Clinical Professor of Medicine

A.B., Harvard, 1907, A.M., 1908; M.D., Johns Hopkins, 1912. Medical House Officer, Johns Hopkins Hospital, 1912–13; Surgical House Officer, Peter Bent Brigham Hospital, Boston, 1913–15; Instructor in Research Medicine, Hooper Foundation for Medical Research, University of California, 1915–17; Assistant Clinical Professor of Medicine, University of California Medical School, 1917–26; Chief, Medical Department, Mount Zion Hospital, San Francisco, 1918–28. At Stanford since 1926.

Huskey, Anne K. (Mrs.) (1234) 1344 Emerson, P* (PA 653W)
Secretary, Civil Engineering

At Stanford since 1916.

Huston, Margaret Davidson (Mrs.) (1234) 575 Salvatierra* (PA 644)
Secretary, Committee on Scholarship

Ph.B., University of Chicago, 1903. At Stanford since 1922.

†Ichihashi, Yamato (1234) 523 Salvatierra (PA 1477W)
Associate Professor of Japanese History and Government

A.B., Stanford, 1907, A.M., 1908; Ph.D., Harvard, 1914. Assistant in Economics, Stanford University, 1908–10; Special Agent for U.S. Immigration Commission, 1908–10; Graduate Student, Harvard University, 1910–12, Henry Bromfield Roger Memorial Fellow in Sociology, 1911–12; Adviser to Government Delegates of Japan, First International Labor Conference, Washington (D.C.), 1919; Confidential Secretary to the Japanese Senior Delegate, Washington Conference, 1921–22. At Stanford 1908–10, and since 1913.

†Inman, Thomas George (123) 4547 California, SF-sf (Skyline 7036)
Associate Clinical Professor of Medicine (Neurology)

Ph.G., California College of Pharmacy, 1892; M.D., Cooper Medical College, 1894. Assistant Demonstrator of Anatomy, Cooper Medical College, 1895–1900; Instructor in Applied Anatomy, 1900-1911; Assistant Surgeon, St. Luke's Hospital, San Francisco, 1906–13; Neurological Institute, Frankfurt-am-Main, 1913, Berlin, Paris, 1914; Visiting Neurologist, St. Luke's Hospital, San Francisco, 1915–21, and since 1924; Lieutenant, U.S.N.R.F., December 1917 to February 1919. At Stanford since 1915.

Irwin, Thomas George (123) Stanford Union-*44* (PA 2900)
Instructor in Journalism, and Director of Publicity

At Stanford since 1928.

†Jackson, Jacob Hugh (1234) 445 El Escarpado-*2428* (PA 3636)
Professor of Accounting (Graduate School of Business)

A.B., Simpson, 1912; M.B.A., Harvard, 1920. C.P.A. (Wisconsin) 1919, (Massachusetts) 1920, (California) 1927. Instructor in Bookkeeping, Davenport (Ia.), and St. Louis (Mo.), High Schools, 1913–16; Assistant Professor of Commerce, University of Oregon, 1916–17; Traveling Fellow, American University, 1917–18; Assistant Professor of Accounting, University of Minnesota, 1918-19; Assistant Professor of Accounting, Graduate School of Business Administration, Harvard University, 1920–21, Professor of Accounting, 1923–27; Lecturer in Auditing, New York University, 1922–23, University of Chicago, Summer Quarter, 1923; Associated with Price, Waterhouse & Co., New York and Boston, 1921–26, San Francisco, since 1927. At Stanford since 1926.

†Jacobsen, Lydik Siegumfeldt (123) 248 Mariposa, P* (PA 2243W)
Assistant Professor of Mechanical Engineering

A.B., Stanford, 1921, Ph.D., 1927. Engineering Research with Westinghouse Electric and Manufacturing Company, East Pittsburgh (Pa.), 1921–24. At Stanford since 1924.

†Johnson, Charles Christian (123) 2841 Sacramento, SF-sf
Instructor in Pharmacology [(Fillmore 7359)

A.B., Stanford, 1924, M.D., 1928. Assistant in Instruction, Pharmacology, Stanford, 1927–28. At Stanford since 1927.

†Johnson, Obed Simon (123) 6542 Dana, Oakland-o (Piedmont 7739W)
Instructor in Chinese Language and Civilization

A.B., Carleton, 1906; B.D., Oberlin, 1909; Ph.D., California, 1925. Student of Chinese Language and Educational Work, Canton, China, 1909–16; Student, Union Theological College, New York City, 1917; Teacher of Church History, Union Theological College, Canton, China, 1917–23; Teacher of New Testament Greek, Lingman University, Canton, China, 1921–23; Student, Union Language School, Peking, China, 1922; Student, Department of Oriental Languages, University of California, January 1924–December 1925. At Stanford since 1927.

†Johnston, Oliver Martin (124) 528 Alvarado-*1132* (PA 3227W)
Professor of Romanic Languages

A.B., Mississippi College, 1890, A.M., 1892; Ph.D., Johns Hopkins, 1896. Principal, Preparatory Department, Mississippi College, 1890–91, Professor of English, 1891–93; Fellow in Johns Hopkins University, 1895–96; Lecturer in French Philology, Bryn Mawr College, 1896–97; Secretary, Pacific Coast Philological Association, 1909–13, President, 1917; Professor of French, University of California, Summer Session, 1919; Professor of Italian, University of Chicago, Summer Quarter, 1922; Professor of French, University of Washington, Summer Quarter (First Term), 1924, University of Colorado, Summer Quarter (First Term), 1926; President, Modern Language Association of Northern and Central California, 1926–27. At Stanford since 1897.

†Jones, Eliot (123) 611 Salvatierra-*2575* (PA 1923M)
Professor of Economics

A.B., Vanderbilt, 1906; A.M., Harvard, 1908, Ph.D., 1913. Instructor in Economics, Harvard University, 1912–13, University of Pennsylvania, 1913–14; Associate Professor of Economics, Iowa State University, 1914–16; Professor of Economics, University of Texas, 1916–17; Federal Trade Commission, 1917; War Industries Board, 1918; Lecturer in Economics, University of California, Summer Session, 1920, 1921, 1924; McKinley Professor of Public Utilities, University of Illinois, 1924–25; Lecturer in Economics, University of Chicago, Summer Quarter, 1925. At Stanford since 1917.

†Jungeblut, Claus W. (123) 574 Foothill Road (PA 3459)
Associate Professor of Bacteriology and Experimental Pathology

Graduate, Kaiser Friedrich Gymnasium, Berlin, 1915; M.D., Universität Bern, 1921. Institut zur Erforschung der Infektionskrankheiten, Bern, 1920–21; Chirurgische Universitätsklinik, Basel; Gynecologische Klinik, Barmen; Institut für Infektionskrankheiten "Robert Koch," Berlin, 1921–22; Institute für experimentelle Therapie, Berlin-Dahlem, 1922–23; Assistant Bacteriologist, Division of Laboratories and Re-

search, New York State Department of Health, Albany, 1923–25, Bacteriologist, 1925–27; Institut für experimentelle Therapie, Frankfurt-am-Main, Summer, 1926; Fellow in Medicine, National Research Council, Department of Bacteriology, Columbia University, 1927. At Stanford since 1927.

KATZ, LOUISE WALDMAN (1234) 513 Salvatierra-*1043* (PA 1025)
Cataloguer, Hoover War Library

B.S., Cornell, 1900. Graduate work in History, Cornell University, 1900–1901; Student, New York State Library School, Albany (N.Y.), 1901–3; Cataloguer, University of California, 1903–11; Special Cataloguer, University of Illinois, 1913–14; Catalogue Reviser, University of Minnesota, 1914–16; Cataloguer, Lane Medical Library, 1917–20; Catalogue Reviser and Classifier, University of Minnesota, 1920–21. At Stanford 1916–17, and since 1921.

†KAY, WILLARD E. (123) 114 Fifteenth Ave., SF-sf (Evergreen 8212)
Clinical Instructor in Medicine

A.B., Stanford, 1912, A.M. (in Medicine), 1915, M.D., 1916. Junior and Senior Interneships, Lane Hospital, 1916–18; U.S.A. Medical Corps (Base and General Hospitals), 1918–20; U.S. Public Health Service (P.A. Surgeon), 1920–22. At Stanford 1913–14, and since 1923.

†KELLEY, KENNETH KEITH (123) 329 Middlefield, P-p (PA 131R)
Acting Assistant Professor of Chemistry

A.B., Stanford, 1923, A.M., 1924, Ph.D., 1926. Instructor in Applied Mathematics, Stanford, 1923–25, Instructor in Mathematics, 1925–26; National Research Fellow in Chemistry, University of California, 1926–28.

[†KELLEY, TRUMAN LEE 541 San Juan* (PA 1646)
Professor of Education and Psychology]

A.B., Illinois, 1909, A.M., 1911; Ph.D., Columbia, 1914. Consulting Psychologist, Culver Military Academy, 1913–14; Adjunct Professor of Educational Psychology, University of Texas, 1914–17; Assistant Professor of Education, Teachers College, Columbia University, 1917–21; engaged in Psychological and Statistical Work for Surgeon General's Office, Adjutant General's Office, and for Committee on Education and Special Training, 1917–18; Chief Statistician, Elementary School Intelligence Examination Board of National Research Council, Summer, 1918. At Stanford since 1921.

†KELLY, THOMAS HENSHAW (123) 2936 Divisadero, SF-sf (Walnut 3434)
Clinical Instructor in Medicine

M.D., University of Cincinnati, 1914. Interne, Cincinnati General Hospital, 1914–15; Instructor in Medicine (full-time), University of Cincinnati, 1915–19; Medical Director, St. Francis Hospital, San Francisco, 1920; First Lieutenant, Captain, Major, M.C., U.S.A., 1917–19. At Stanford since 1921.

†KENNEDY, ARTHUR GARFIELD (23) 435 Coleridge, P-*1706* (PA 1446)
Associate Professor of English Philology

A.B., Doane College, 1902; A.M., Nebraska, 1905; Ph.D., Stanford, 1914. Teacher, Chadron (Nebr.) Academy, 1902–4, Norfolk (Nebr.) High School, 1905–8; Instructor in German and English, Spearfish (S.D.) State Normal School, 1908–12. At Stanford since 1914.

†KENNEY, WILLIAM (123) 1379 Sixth Ave., SF-sf (Sunset 1310)
Clinical Instructor in Medicine

M.D., California, 1905. Resident Physician, St. Luke's Branch Hospital, 1906–8; Resident Physician, Relief Home, 1908–14. Assistant in Medicine, Stanford Medical School, 1914–16, and since 1917.

†KERR, PAUL FRANCIS (4) Ventura-v
Acting Assistant Professor of Geology

B.S., Occidental, 1919; Ph.D., Stanford, 1923. Acting Instructor in Geology, Stanford, Autumn Quarter, 1923, Acting Assistant Professor, Summer Quarters, 1926, 1927, 1928; Instructor in Mineralogy, Columbia University, 1924–26, Assistant Professor, 1926–29.

[†KINDY, WARD B. 566 Everett, P-p (PA 2534J)
Assistant Professor of Electrical Engineering]

B.E.E., Ohio State, 1916. Electrical Inspector, U.S. Army Signal Corps, 1916–17; Aërial Gunnery Instructor, U.S. Naval Air Station, Key West, 1918; Instructor in Electrical Engineering, Iowa State College, 1920–21. At Stanford since 1921.

KINGSLEY, JOHN STERLING (4) 2500 Cedar, Berkeley-b (Ashberry 6423)
Lecturer in Biology

A.B., Williams, 1875; D.Sc., Princeton, 1885. Professor of Biology, Indiana University, 1887–89, University of Nebraska, 1889–91, Tufts College, 1892–1913; University of Illinois, 1913–20, Emeritus, 1920.

†KINGSTON, JOHN JOSEPH (123) 231 Thirty-second Ave., SF-sf
Clinical Instructor in Pediatrics [(Evergreen 5070)

M.D., California, 1921. Interne, University Hospital, 1920–21; Assistant in Pediatrics, University Hospital, 1921–22. At Stanford since 1923.

†KIRKWOOD, MARION RICE (1234) 249 Lowell, P* (PA 2120W)
Professor of Law, and Dean of the School of Law

A.B., Stanford, 1909, J.D., 1911; LL.D., University of Southern California, 1926. Assistant Professor of Law, University of Oklahoma, 1911–12; Acting Professor of Law, Cornell, Summer Session, 1927. At Stanford since 1912.

†KNOWLTON, EDGAR COLBY (4) Stanford Union-*1666*
Acting Professor of English

A.B., Harvard, 1912, A.M., 1913, Ph.D., 1918. Instructor in English, Lafayette, 1913–16; Instructor in English, Illinois, 1919–21; Associate Professor of English, Ohio Wesleyan, 1921–24, Professor since 1924; Visiting Professor of English, University of Texas, Summer Session, 1927.

†KOFOID, CHARLES ATWOOD (4) 2616 Etna, Berkeley-b (Berkeley 1059)
Lecturer in Zoölogy

A.B., Oberlin, 1890; A.M., Harvard, 1892, Ph.D., 1894; Hon.D.Sc., Oberlin, 1915, University of Wales, 1920. Instructor in Vertebrate Morphology, University of Michigan, 1894–95; Superintendent, Biological Station, University of Illinois, 1895–1900, Assistant Professor of Zoölogy, 1897–1900; Assistant Professor and Associate Professor of Histology and Embryology, University of California, 1900–1910, Professor of Zoölogy, since 1910.

†KRAUSE, ALLEN KRAMER (4) Desert Sanatorium, Tucson, Ariz.
Clinical Professor of Medicine

A.B., Brown, 1901, A.M., 1902; M.D., Johns Hopkins, 1907. Assistant and Instructor, Johns Hopkins, 1907–9; Associate Director, Saranac Laboratory for the Study of Tuberculosis, 1909–16; Associate Professor of Medicine, Johns Hopkins Medical School, 1916–29. At Stanford since 1929.

†KREUTZMANN, HENRY A. R. (123) 123 Alhambra, SF-sf (Walnut 2763)
Clinical Instructor in Surgery (Genito-Urinary)

M.D., University of Pennsylvania, 1916. Instructor in Physiology, Harvard Medical School, 1916–17; Surgical House Officer, Peter Bent Brigham Hospital, Boston, 1917–18; First Lieutenant, M.C., A.E.F., 1918–19; Urologist, N.W.P.P.R.R., San Francisco; Urologist, Chinese Hospital. At Stanford since 1928.

†KREY, AUGUST CHARLES (4) Kingscote*
Acting Professor of History

A.B., Wisconsin, 1907, A.M., 1908, Ph.D., 1914. Scholar in European History, Wisconsin, 1907–8, Fellow, 1909–10; Instructor in European History, Texas, 1910–12, Illinois, 1913–14; successively, Instructor, Assistant Professor, Associate Professor, Professor in European History, Minnesota, since 1913; Acting Professor of History, Michigan, 1924, Wisconsin, 1925, Michigan, 1926.

†KRUEGER, ALBERT PAUL (124) Baywood, P-*1634* (PA 3618)
Instructor in Bacteriology

A.B., Stanford, 1925, M.D., 1929. Teaching Assistant in Bacteriology, Stanford,

Summer Quarter, 1927, Acting Instructor, Summer Quarter, 1928; Interne in Bacteriology and Experimental Pathology. At Stanford since 1928.

KUTZER, ALMIRA (2) 2340 Clay, SF-sf (West 6193)
Acting Instructor in Practice of Nursing

†LAMSON, DAVID (1234) Blossom Knoll, Los Altos-*3001* (LA 318)
Sales Manager, University Press

A.B., Stanford, 1925. At Stanford since 1925.

LANDIS, MAUDE (1234) 2340 Clay, SF-sf (West 6193)
Superintendent of Nurses, and Professor of Nursing

A.B., Kansas, 1897; Graduate, Scarritt Hospital Training School, 1900. Graduate Study, Presbyterian Hospital, Chicago, 1905; Graduate Study, Department of Nursing and Health, Columbia University, 1917; Superintendent of Hospitals and Training Schools, 1901–17; Member, Missouri State Board of Examination and Registration of Nurses, 1909–14; Educational Director, Lakeside Hospital Training School, Cleveland (Ohio), 1917–18; Director, Connecticut Training School for Nurses, in affiliation with Yale University Medical School, 1918–21. At Stanford since 1921.

LANGNECKER, HARRY LESLIE (1234) 1711 Webster, P-p (PA 854)
Associate Professor of Medicine (Physical Therapeutics)

A.B., Stanford, 1901; M.D., Johns Hopkins, 1906. House Officer, Johns Hopkins Hospital, 1906–8; Orthopedic House Officer, Massachusetts General Hospital, 1908, Assistant in Orthopedic Out-Patient Department, 1909–10, Assistant Resident Physician, 1911–13, Assistant to Orthopedic Surgeon-in-Chief, 1913–15; Lieutenant, M.C., U.S.N.R.F., April 1917 to March 1919. At Stanford since 1915.

†LANZ, HENRY (1234) 786 Melville, P-p (PA 4010)
Assistant Professor of Slavic Languages

Ph.D., Heidelberg, 1911. Student, Imperial University, Moscow, 1904–6, Heidelberg, 1906–11; Instructor-elect in Logic, Reform Gymnasium, and Lecturer in Aesthetics, Beethoven School of Music, Moscow, 1914. At Stanford since 1918.

†LARSEN, HENNING (4) 611 Alvarado (PA 515M)
Acting Associate Professor of English

A.B., Luther College, 1908; A.M., Iowa, 1911; Ph.D., Princeton, 1915. Graduate Scholar in English, Iowa, 1909–10, Assistant in English, 1910–11; Scholar of American Scandinavian Foundation for study in Norway, 1912–13; University Fellow, Princeton, 1913–14, Procter Fellow, 1914–15; Assistant Professor of English, Iowa, 1915–24; Fellow of American Scandinavian Foundation for Study in Norway, 1923–24; Acting Professor of English, Chicago, Summer Quarter, 1928; Associate Professor of English, Iowa, since 1924.

LAYMAN, MARY H. (123) 2116 Pacific, SF-sf (Walnut 5255)
Assistant Clinical Professor of Pediatrics

M.D., Ludwig-Maximilian University, Munich, 1913. Assistant, Medical and Pediatric Clinic, Munich, 1915–16; Assistant, Pediatric Clinic, Stanford Medical School, since 1917; Assistant Visiting Physician, Pediatrics, San Francisco Hospital, 1918–20. At Stanford since 1917.

†LEARNED, HENRY BARRETT (1) 344 Serra (PA 2778)
Acting Professor of History

A.B., Harvard, 1890, A.M., 1897; Ph.D., Yale, 1909. Assistant in History, Harvard, 1897–98; Instructor in History, Yale, 1900–1906; Lecturer, Wesleyan University, Middletown (Conn.), 1909–10; Special Agent, Department of Justice, Washington (D.C.), 1917–19; Lecturer in European History, Stanford, 1920, 1921, Acting Associate Professor, 1922, Acting Professor, Winter Quarter, 1926–27.

†LEE, RUSSEL VAN ARSDALE (123) 446 Foothill Road (PA 2210)
Assistant Clinical Professor of Therapeutics

B.S., California, 1917; M.D., Stanford, 1920. Senior Interne in Medicine, Stanford, 1920–21; Visiting Physician, San Francisco Hospital, since 1921. At Stanford since 1921.

LEE, RUTH DORINDA TOLDERVEY (1234) 660 Salvatierra (PA 3988J)
Secretary to Dr. Alsberg, Food Research Institute

A.B., Stanford, 1922. At Stanford since 1925.

†LEE, WILLIAM BELL (124) Stanford Union-*1112* (PA 2900)
Acting Assistant Professor of Chemistry

B.Sc., London, 1912; B.A., B.Sc., Oxford, 1922, M.A., 1927; Ph.D., Bristol, 1927. Science Teacher, Dollar Academy, N.B., 1913–14; Chemist and Assistant Process Manager, Brunner Mond & Co., 1915-19; Research Chemist, British Dyes, Ltd., 1919; Lecturer in Physics, Birmingham Technical College, 1920; Research Chemist, Oxford University, 1920–23; Instructor in Chemistry, Cirencester, G.S., 1924; Research Investigator, British Adhesives Research Committee, Bristol University, 1925–27.

†LEIGHTON, PHILIP ALBERT (123) 455 Cornell, M* (PA 1223R)
Instructor in Chemistry

A.B., Pomona College, 1920, A.M., 1923; A.M., Harvard, 1925, Ph.D., 1927. Instructor in Chemistry, Harvard, 1926–27; Sheldon Traveling Fellow from Harvard, 1927–28. At Stanford since 1928.

†LEMOS, PEDRO J. (234) 460 Churchill, P-*1333* (PA 396J)
Director of the Museum and Art Gallery

Assistant Professor of Etching and Lettering, University of California, 1910–11, Professor of Design and Applied Arts, 1911–12; Director of San Francisco Institute of Art, 1912–17; Exhibitor, Pennsylvania Academy of Fine Arts, Carnegie Institute, Pittsburgh, Brooklyn Museum of Fine Arts, Chicago Art Institute, New York Galleries, Panama-Pacific International Exposition; editor of the *School Arts Magazine*. At Stanford since 1917.

†LESLEY, EVERETT PARKER (123) 582 Alvarado* (PA 1570)
Professor of Mechanical Engineering

A.B., Stanford, 1897; M.M.E., Cornell, 1905. Apprentice and Foreman in Union Iron Works, San Francisco, 1897–1903; Assistant Inspector to Naval Constructor, 1903–4; Draftsman at U.S. Experimental Model Basin, Washington (D.C.), 1905–7. At Stanford since 1907.

LEWIS, IVEY FOREMAN (4) Bay View, Carmel*
Acting Professor of Botany (Hopkins Marine Station)

A.B., North Carolina, 1902, M.S., 1903; Ph.D., Johns Hopkins, 1908. Fellow, Johns Hopkins, 1906–7, Bruce Fellow, 1907–8; Professor of Biology, Randolph-Macon College, 1905–6, 1908–12; Student, Naples Station and Bonn University, 1908; Assistant Professor of Botany, Wisconsin, 1912-14; Professor of Botany, Missouri, 1914–15; Miller Professor of Biology, University of Virginia, since 1915; Instructor in Botany, Marine Biological Laboratory, Woods Hole (Mass.), 1910–17, Instructor in Charge, 1917–27.

†LEWIS, JOHN KENT (23) 2845 Washington, SF-sf (West 4136)
Instructor in Medicine

A.B., Stanford, 1918, M.D., 1922. Junior Interne, Lane Hospital, 1921–22; Resident in Medicine, Lane Hospital, 1923–25; Fellow in Medicine, Johns Hopkins, 1927–28. At Stanford since 1923.

VON DER LEYEN, FRIEDRICH GUSTAV (4) 659 Salvatierra (PA 3851W)
Acting Professor of German

Ph.D., 1894. Privatdocent University of München, 1899, Ausserordentlicher Professor, 1906; Visiting Professor, Yale, 1913–14; Ordentlicher Professor, University of Köln, since 1920.

†LIGGETT, JAMES BENNETT (123) 760 Waverley, P-p (PA 824J)
Teaching Specialist in Foundry Practice

Apprentice and Foundry Molder, Falls Rivet and Machine Co., Cuyahoga Falls (Ohio), 1883–88, Webster, Camp & Lane, Akron (Ohio), 1888–93, Bowler & Co.

Cleveland (Ohio), 1893–98, Cleveland Steel Casting Co., 1898–99; Foreman, Born Steel Range Co., Cleveland (Ohio), 1899–1902, Westinghouse Electric Co., Cleveland (Ohio), 1902. At Stanford since 1902.

†Liston, Edward (123) 226 Madroño, P-p (PA 3144)
Assistant Medical Adviser of Men

†Littler, Robert M. C. (123) 151 Cowper, P-p (PA 619J)
Acting Instructor in English (Public Speaking)
A.B., Stanford, 1925, A.M., 1927, J.D., 1929.

†Long, Royce Reed (1234) 415 Pope, P-*566* (PA 143J)
Associate Professor of Hygiene and Physical Education
A.B., Stanford, 1908. Assistant in Physical Education, Stanford, 1902–4; Director of Gymnasium and Track Coach, Vanderbilt University, 1904–6; Instructor and Assistant Professor of Hygiene, Stanford, 1906–14; Professor of Physical Education and Hygiene, Colorado State Teachers College, 1914–16, 1919–27; Graduate Student, Johns Hopkins University, 1916–17; First Lieutenant and Captain, S.C., U.S.A., 1917–19; Professor of Health Education, Colorado State Teachers College since 1927.

Longyear, Hilda (1) 424 Seneca, P-*2647* (PA 1524W)
Assistant Director (Encina Commons)
B.S., Cornell University, 1926. At Stanford since 1926.

†Lorenzen, Ernest Gustav (4) 12 Stanford Union (PA 2900)
Acting Professor of Law
Ph.B., Cornell, 1898, LL.B., 1899; J.U.D., Göttingen, 1901; A.M. (Hon.), Yale, 1917. Student, Universities of Paris, Heidelberg, and Göttingen, 1899–1901; General Law Practice, 1901–3; Professor of Law, University of Maine, 1903–4; Professor of Law, George Washington University, 1904–11, Dean, 1910–11; Professor of Law, University of Wisconsin, 1911–14, University of Minnesota, 1914–17; Professor, Yale School of Law, since 1917.

†Lovell, Howell (123) 865 Sunnyhills, Oakland-o (Holiday 9487)
Lecturer in Legal Medicine
Member of the San Francisco Bar.

†Luck, James Murray (124) Park, Ravenswood* (PA 3425M)
Assistant Professor of Biochemistry
A.B., University of Toronto, 1922; Ph.D., Cambridge University, 1925. Student, Royal Commission for the Exhibition of 1851, 1922–25; Demonstrator in Biochemistry, University of Toronto, 1925–26. At Stanford since 1926.

†Lundquist, Dell Theodore (1234) 2295 Emerson, P* (PA 1113)
Medical Examiner
A.B., Stanford, 1922, M.D., 1927. Senior Interne and House Officer in Surgery, Lane and Stanford University Hospitals, 1927–28. At Stanford since 1928.

Luther, Chester Francis (1234) Stanford Union-*2714* (PA 2900)
Acting Instructor in Mathematics
A.B., Stanford, 1928.

†Lutz, Ralph Haswell (23) 344 Serra-*67* (PA 2778)
Associate Professor of History
A.B., Stanford, 1906; LL.B., Washington, 1907; Ph.D., Heidelberg, 1910. Student, Universities of California, Summer 1906, Bonn and Heidelberg, 1907–10, Berlin, Summer, 1913; Instructor in History, University of Washington, 1911–16, Assistant Professor, 1916–20; Lecturer in European History, Stanford University, 1915–16. At Stanford, 1915–16, and since 1920.

†Lyman, George Dunlap (123) 3673 Jackson, SF-sf (Bayview 3570)
Lecturer in Pediatrics

A.B., Stanford, 1905; M.D., Columbia University, College of Physicians and Surgeons, 1909. Interne, Bellevue Hospital, New York, 1911; Externe, Waissen Haus, Berlin, 1913.

†Lyon, Leonard Saxton (2) 708 National City Bank Bldg.
Lecturer in Law [Los Angeles-la (Faber 3901)

A.B., Stanford, 1918.

†McBain, James William (123) 571 Foothill Road (PA 2065)
Professor of Chemistry

A.B., University of Toronto, 1903, A.M., 1904; Ph.D., Heidelberg, 1908; Hon. Sc.D., Brown University, 1923, University of Bristol, 1928, Fellow of the Institute of Chemistry. Lecturer in Physical Chemistry, University College, Bristol, England, 1906–19, Leverhulme Professor of Physical Chemistry, 1919–26; President, Association of University Teachers, Great Britain, 1922–23; Fellow of the Royal Society, 1923; President, Bristol University Alumni Association, 1923–26; Visiting Professor, University of California, 1926; Vice-President, Faraday Society, since 1926. At Stanford since 1926.

McBain, Mary Evelyn Laing (Mrs.) (123) 571 Foothill Road
Assistant Professor of Chemistry [(PA 2065)

Sc.D., University of Bristol, 1922. Research Associate, University of Bristol, 1922–26; awarded Ellen K. Richards Prize in Chemistry. At Stanford since 1926.

†McCabe, Edward Raynsford Warner (123) 587 Alvarado* (PA 3720)
Professor of Military Science and Tactics (Field Artillery)

Graduate, Infantry and Cavalry School, 1906, Mounted Service School, 1907, Field Artillery School (Advanced Course), 1924. Student, University of Virginia, September, 1896, to January, 1900; entered the Regular Army, 1900; Lieutenant Colonel, Field Artillery. At Stanford since 1927.

McClanahan, Margaret Hope (123) 2045 California, SF-sf (West 3781)
Assistant Superintendent of Nurses

A.B., Cornell University, 1916. At Stanford since 1924.

McClelland, John (123) 1180 California, M-*1036* (PA 1496R)
Instructor in English

A.B., Stanford, 1924, A.M., 1925. At Stanford since 1925.

McCracken, Mary Isabel (123) 634 Arguello-*1545* (PA 1127W)
Associate Professor of Zoölogy

A.B., Stanford, 1904, A.M., 1905, Ph.D., 1908. Student, Paris and London, 1913–14. At Stanford since 1904.

McCully, Leona Hadley (Mrs.) (4) 1035 Bryant, P-p (PA 709M)
Acting Assistant Professor of Education

A.B., Indiana University, 1905; A.M., Stanford, 1928. Teacher of History, Evansville (Ill.) High School, 1905–7; Instructor in Psychology, State Teachers College, Chico, 1921–22; Counselor and Teacher of Social Studies, Palo Alto Union High School, since 1922; Acting Assistant Professor of Education, Stanford, Summer Quarters, since 1927, Assistant in Instruction, Autumn Quarters, since 1926.

†McDowell, John Ezra (1234) Los Altos-*131* (LA 56)
Academic Secretary, and Alumni Secretary

A.B., Stanford, 1900. At Stanford since 1900.

†McFarland, Frank Mace (123) 775 Santa Ynez (PA 480)
Professor of Histology

Ph.B., De Pauw, 1889; A.M., Stanford, 1893; Ph.D., Würzburg, 1896. Professor of Biology and Geology, Olivet College, 1889–92; Student, Würzburg, Zürich, and Naples, 1894–96. At Stanford since 1892.

†MacGinitie, George Eber (1234) 210 Granite, Pacific Grove-pg
Instructor in Zoölogy (Hopkins Marine Station) [(Monterey 1813)

A.B., Fresno State Teachers College, 1925; A.M., Stanford, 1928. Assistant Instructor in Biology, Fresno State Teachers College, 1925–27, Instructor, 1927–28. At Stanford since 1928.

[†McGregor, Richard Crittenden
Lecturer in Zoölogy (Ornithology)]

A.B., Stanford, 1898. Curator of Birds, Bureau of Science, Philippine Islands. Associate Editor of the Publications of Bureau of Science, Philippine Islands.

†MacKay, Eaton MacLeod (1234) 201 San Carlos, Sausalito-s
Instructor in Medicine [(Sausalito 350)

A.B., University of California, 1921, A.M., 1925; M.D., Stanford, 1926. Assistant in Biochemistry, University of California, 1921; Interne, Metabolism Laboratory, Stanford Medical School, 1925–26; Assistant Resident Physician, Hospital of the Rockefeller Institute for Medical Research, 1926–27, Assistant in Medicine, 1927–28. At Stanford since 1928.

McKendry, Marion (1234) 657 Santa Ynez-*1265* (PA 2141W)
Secretary, School of Law

At Stanford since 1915.

†McKenney, Arthur Carol, Jr. (123) 1122 Green, SF-sf
Clinical Instructor in Medicine [(Graystone 9255)

A.B., Stanford, 1922, M.D., 1925. House Officer in Medicine, San Francisco Hospital, 1925–26, Assistant Visiting Physician since 1926; Consultant in Medicine to U. S. Veterans' Hospital, Palo Alto, since 1928. At Stanford since 1926.

†McLaughlin, Roy Parmelee (123) 2055 Milan, S. Pasadena-sp
Lecturer in Oil Technology and Petroleum Engineering

A.B., Stanford, 1902, Engineer, 1915. Assistant Engineer, North Star Mines Co., Grass Valley (Calif.), 1904; Engineer, Standard Consolidated Mining Co., Bodie, 1905–6, Mono Lake Railway and Lumber Co., 1907; Geologist, Associated Oil Co., San Francisco, 1908–12; Chief of Petroleum Department, California State Mining Bureau, 1913–15; California State Oil and Gas Supervisor, 1915–20; Consulting Petroleum Engineer and Geologist, 1921–22. At Stanford since 1922.

McLean, Philip Taggart (1234) 330 Waverley, P-*1513*
Reference Librarian, Hoover War Library

A.B., Pomona, 1925. At Stanford since 1925.

†McMurphy, James Ira Wilson (123) 144 Melville, P-p (PA 1159W)
Associate Professor of Botany

A.B., Stanford, 1908, A.M., 1909. Assistant in Botany, University of Wisconsin, 1912–13. At Stanford since 1908.

†McNaught, Harvard Young (123) 2979 Lake, SF-sf (Evergreen 7330)
Associate Clinical Professor of Surgery (Otology, Rhinology, Laryngology)

M.D., C.M., Trinity University, 1897. Fellow by Examination, Trinity Medical College, 1897; Assistant, Ear, Nose, and Throat Clinic, Cooper Medical College, 1911–12. At Stanford since 1913.

†MacQuarrie, Thomas William (4) 309 S. Eighth, San Jose-sj
Acting Professor of Education [(Columbia 693)

A.B., Stanford, 1922, A.M., 1923, Ph.D., 1924. Principal and Teacher in Public Schools, 1900–1905; Principal, Boys' Preparatory School, 1905–17; Captain, Infantry, U.S. Army, 1917–18, Major, 1918–19; Director of Vocational Education, Fourth Division, U.S. Army, 1920–21; Co-ordinator, U.S. Veterans Bureau, Stanford, 1922–24; Instructor in Education, Stanford, Summer Quarter, 1924; Assistant Professor of Education, University of Southern California, 1924–25, Professor of Education

and Director of University College, 1925–27; President, San Jose State Teachers College, since 1927; Acting Assistant Professor of Education, Stanford, Summer Quarter, 1928.

MADVIG, ELSBETH (MRS.) (1234) 147 Emerson, P-*874* (PA 524M)
Secretary, Geology
At Stanford since 1927.

MAHR, AUGUST CARL (124) 565 Salvatierra-*63*
Assistant Professor of German
Ph.D., Heidelberg, 1911; Oberlehrer-Examen, Karlsruhe, 1912, Instructor in German, Sheffield Scientific School, Yale University, 1912–14; Director of the Zentralstelle für Kulturelle Arbeiten in Rüstringen and Editor of *Die Tide,* 1918–21; Teacher of English, German, and History of Art, Bergschule Hochwaldhausen, 1921–23. At Stanford since 1924.

†MALONEY, HENRY WILFRED (1234) 518 Governor's-*57* (PA 696)
Director, Department of Physical Education and Hygiene
Military Gymnastic School, Dublin, Ireland, 1899; Physical Instructor, British Army, 1899–1900; British War Service, South Africa, 1901–2; Gymnastic School, Pasadena, 1904–8; Chairman, Executive Committee, University and Club (Soccer) Football League since 1915; Captain and Athletic Officer, A.E.F., 1917–18; Track Coach and Trainer, U.S. Track Team, Inter-Allied Games, Paris, France, 1919; Trainer and Rugby Commissioner, Rugby Teams, Olympic Games, Antwerp, Belgium, 1920; President, California Rugby Union, since 1920; Western Representative, National (Soccer) Football Association, since 1922; Coach and Manager, Stanford's Australian Tennis Tour, Summer, 1924; Member, National A.A.U. Boxing Committee, 1925–27; President, Pacific Athletic Association of the A.A.U., 1925–27; President Collegiate (Soccer) Football League, 1926. At Stanford since 1908.

†MANNING, WILLIAM ALBERT (1234) 649 Alvarado (PA 2326)
Professor of Mathematics
A.B., Willamette University, 1900; A.M., Stanford, 1902, Ph.D., 1904. Student, University of Paris, 1904–5. At Stanford since 1900.

†MANWARING, WILFRED HAMILTON (1234) 364 Kingsley, P-*51* (PA 1509)
Professor of Bacteriology and Experimental Pathology
B.S., Michigan, 1895; M.D., Johns Hopkins, 1904. Fellow and Assistant in Pathology, University of Chicago, 1904–5; Associate Professor of Pathology and Bacteriology, Indiana University, 1905–7; Traveling Fellow, Rockefeller Institute, 1907–8, Wassermann's Laboratory, Berlin, 1907–8, Ehrlich's Laboratory, Frankfurt-am-Main, 1908–9, Physiological Institute, London, 1909–10; Assistant in Pathology, Rockefeller Institute, 1910–13; Lecturer in Functional Pathology, Washington University Medical School, 1920–21. At Stanford since 1913.

†MARRA, WALDO JOSEPH (23) Belmont-b (B 52)
Lecturer in Journalism
A.B., New York University, 1915, A.M., 1919. Member of Staff, Alexander Hamilton Institute, 1917–18; Fellow in Business English, School of Commerce, New York University, 1917–19; Instructor in English, New York University, 1918–19; Instructor in Economics, University of California, 1919–20, Fellow in History, 1920–21; Correspondence Director, Bank of Italy, N.T. and S.A., San Francisco, 1921–29; Instructor in Business English, University of California, Extension Division, since 1919; Lecturer in Business Correspondence, American Institute of Banking, since 1921, San Francisco Stock Exchange Institute, since 1927.

MARSHALL, HELEN (1234) 1476 Alvarado, Burlingame-b (B 4831R)
Instructor in Psychology and Psychiatry
A.B., Lake Erie, 1913; A.M., Ohio State, 1918. Research Assistant, Commonwealth Fund, Department of Psychology, Stanford, 1921–23; Assistant in Psychology and Neuro-Psychiatry Clinic, 1923–26. At Stanford since 1921.

†MARTIN, ERNEST GALE (123) 770 Santa Ynez* (PA 2732)
Professor of Physiology

Ph.B., Hamline, 1897; Ph.D., Johns Hopkins, 1904. Assistant in Biology, Hamline University, 1896–97; Fellow in Physiology, Johns Hopkins University, 1902–3; Instructor in Physiology, Purdue University, 1904–6; Instructor in Physiology, Harvard University, 1906–10, Assistant Professor, 1910–16; Lecturer in Physiology, Simmons College, 1907–8, Sargent School of Physical Education, 1906–14; Assistant Professor of Physiology, Radcliffe College, 1914–16; Research Physiologist (temporary), U.S. Public Health Service, 1917–20; Member Sub-Committee on Industrial Fatigue, Advisory Commission to Council of National Defense, 1917; Captain, Sanitary Corps, U.S.A., 1918–19. At Stanford since 1916.

†MARTIN, ERNEST WHITNEY (123) 525 Lincoln, P-*143* (PA 1580W)
Professor of Classical Literature

A.B., Chicago, 1900; A.M., Stanford, 1902, Ph.D., 1910. Instructor in Latin and Greek, Private School, Clarinda (Iowa), 1895–96, Principal of High School, 1896–98; Student, University of Berlin and American School of Classical Studies, Rome, 1900–1901; Acting Professor of Latin and Greek, University of Nevada, 1908–9, Professor of Greek, 1909–10. At Stanford since 1901.

†MARTIN, PERCY ALVIN (123) 593 Salvatierra-*819* (PA 2482)
Professor of European History

A.B., Stanford, 1902, A.M., 1903; A.M., Harvard, 1907, Ph.D., 1912. Student, University of Paris, 1903–4, Universities of Berlin and Leipzig, 1907–8; Fellow, Harvard University, 1908; Professor of History and French, Whittier College, 1904–5; Lecturer in Latin-American History, Harvard University, 1915; Lecturer in South American History and Institutions, University of Washington, Summer Session, 1916; Albert Shaw Lecturer on American Diplomatic History, Johns Hopkins University, 1922; Professor of History, University of Hawaii, Summer Session, 1928. At Stanford since 1908.

†MARX, GUIDO HUGO (123) 356 Lincoln, P-*74* (PA 715)
Professor of Machine Design

M.E., Cornell, 1893. With Gleason Tool Co., Rochester (N.Y.), 1893–94; with Bement, Miles & Co., Philadelphia, 1894–95; New School for Social Research, 1920. At Stanford since 1895.

†MASTERS, ALFRED RICHARD (1234) 1005 Parkinson, P-*3006* (PA 3289J)
General Manager, Board of Athletic Control

A.B., Stanford, 1924. At Stanford since 1925.

†MAYNARD, MERLIN T. R. (1234) 604 S. Fifteenth, San Jose-sj
Clinical Instructor in Medicine (Cutaneous Diseases) [(Ballard 7876)

A.B., Stanford, 1919; M.D., Washington University (St. Louis, Mo.), 1922. Interne, Lane Hospital, 1922–23; Diplomate of National Board of Examiners, 1923; Assistant Visiting Dermatologist, San Francisco Hospital, 1924–25, Visiting Dermatologist, 1925–28; Consultant, Dermatology, U.S. Veterans' Diagnostic Center, Palo Alto. At Stanford since 1924.

†MEARS, ELIOT GRINNELL (123) 593 Gerona-*LL* (PA 1500)
Professor of Geography and International Trade (Graduate School of Business)

A.B., Harvard, 1910, M.B.A., 1912. Secretary and Instructor, Harvard Graduate School of Business Administration, 1912–16; Chief, Foreign Service Division, and later American Trade Commissioner in the Near East, United States Bureau of Foreign and Domestic Commerce, Commercial Attaché to American High Commission in Turkey, 1916–20; Economist, Harbord Military Mission to Armenia and Transcaucasia, 1919; Secretary, The Survey of Race Relations, since 1924; Round Table Leader, Institute of International Relations, 1926, 1927, 1928; Member, Honolulu Conference, Institute of Pacific Relations, 1927. At Stanford since 1921.

[MEHERIN, J. MINTON 76 Sea Cliff, SF-sf (Evergreen 611)
Clinical Instructor in Surgery]

M.D., Harvard, 1922. Interne, San Francisco Hospital, 1922–23. At Stanford since 1923.

†MEHRTENS, HENRY GEORGE (1234) 2101 California, SF-sf (Fillmore 6196)
Professor of Medicine (Neuropsychiatry)

B.S., California, 1911; M.D., Stanford, 1913. Senior House Officer, Lane Hospital, 1914–15; Assistant in Medicine (Neurology), Stanford, 1915–16, 1916–17; House Physician, Lane Hospital, since 1915. At Stanford since 1915.

†MENSOR, MERRILL COLEMAN (123) 2224 Nineteenth Ave., SF-sf
Clinical Instructor in Surgery (Orthopedics) [(Montrose 4213)

M.D., California, 1923. Resident Surgeon, Shriners' Hospital for Crippled Children, San Francisco, 1923–24; Surgeon, San Francisco Emergency Service, 1924–26; Orthopedic Surgeon, Mary's Help Hospital, since 1924. At Stanford since 1924.

MERRIAM, KATHARINE (1234) 927 Webster, P-*936* (PA 2465J)
Secretary to Dr. Davis, Food Research Institute

A.B., Mt. Holyoke, 1924. At Stanford since 1925.

MERRILL, MAUD AMANDA (234) 648 Alvarado-*1056* (PA 2180)
Assistant Professor of Psychology

A.B., Oberlin, 1911; A.M., Stanford, 1920, Ph.D., 1923. At Stanford since 1920.

†MESTRE, HAROLD (1234) Colton, Monterey-Box 567, m (Monterey 1973)
Acting Assistant Professor of Biophysics (Jacques Loeb Laboratory)

A.B., California, 1923; Ph.D., Stanford, 1929. Teaching Fellow in Zoölogy, University of California, 1923–24, Assistant, 1924; Assistant Professor of Biology, Fresno State Teachers College, 1924–26, Associate Professor, 1926–27; University Fellow, Stanford, 1927–28.

†MEYER, ARTHUR WILLIAM (123) 121 Waverley, P* (PA 1225)
Professor of Anatomy

B.S., Wisconsin, 1898; M.D., Johns Hopkins, 1905. Assistant and Instructor in Anatomy, Johns Hopkins University, 1905–7; Assistant Professor of Anatomy, University of Minnesota, 1907–8; Professor of Anatomy, Northwestern University, 1908–9; Research Associate, Carnegie Institution, 1917–18. At Stanford since 1909.

MEYRICK, GERALDINE (1234) 128 Kingsley, P* (PA 2755J)
Secretary to Director of Summer Quarter and to Secretary of Stanford National Board

At Stanford since 1921.

MICHELSON, LEWIS (1234) Huntington Apts., SF-sf (Franklin 5400)
Clinical Instructor in Obstetrics and Gynecology

M.D., Cooper Medical College, 1907. Student, Vienna, 1910–11; Special Worker, Brady Urological Institute, Johns Hopkins University, 1916–17; Instructor in Surgery (Genito-Urinary), Stanford, 1917–18; Director of Bureau of Social Hygiene, California State Board of Health, 1918–19. At Stanford since 1919.

†MICHOTTE, ALBERT EDUARD (4) 2 Stanford Union (PA 2900)
Acting Professor of Psychology

Ph.D., University of Louvain, 1900. Agrégé de l'Institut supérieur de Philosophie de Louvain, 1905; Chargé de Cours, University of Louvain, 1906, Professor of Psychology and Director of Psychological Laboratory, since 1908.

MILES, CATHARINE COX (MRS.) (123) 607 Gerona (PA 1731W)
Research Associate, Psychology

A.B., Stanford, 1912, A.M., 1913, Ph.D., 1925. Assistant in Physical Training, Stanford, 1912–13; Student, Universities of Jena and Berlin, 1913–14; Assistant Professor of German, College of the Pacific, 1914–15, Professor, 1915–20, Director of Physical Education for Women, 1918–20; Instructor in German, Stanford, 1920–

23, University Fellow, 1923–24; Director, California Bureau of Juvenile Research, Whittier State School, 1924–25; Psychologist, Central Mental Hygiene Clinic, Cincinnati, 1925–27; Assistant Attending Psychologist, Cincinnati General Hospital, 1925–27; Psychologist, Children's Hospital, Cincinnati, 1926–27; Consultant in Psychology, U.S. Veterans' Bureau Diagnostic Center No. 1, Cincinnati, 1926–27; Lecturer in Educational Psychology, University of Cincinnati, 1926–27. At Stanford 1912–13, 1920–23, and since 1927.

†Miles, Walter Richard (123) 607 Gerona (PA 1731W)
Professor of Experimental Psychology

B.S., Pacific College, 1906; A.B., Earlham, 1908; A.M., Iowa, 1910, Ph.D., 1913. Instructor in Psychology and Education, Penn College, 1908–10; Scholar in Education, University of Iowa, 1909–10, Fellow and Assistant in Psychology, 1910–12; Associate Professor of Psychology, Wesleyan University, 1913–14; Psychologist at Nutrition Laboratory of Carnegie Institution of Washington, Boston (Mass.), 1914–22; Lecturer in Psychology, University of California, First Semester, 1925–26. At Stanford since 1923.

Milligan, Nancy Gertrude (4) Kingscote* (PA 860J)
Acting Assistant Professor of Education

A.B., Southern California, 1919; A.M., Columbia, 1926. Classroom Teacher, Principal, and Supervisor, Arizona and California, 1911–18; Instructor in Adult Education for International Institute, New York City, Spring and Summer Sessions, 1920; Director of Elementary Education and Curriculum Construction, City Schools, San Diego, 1920–24; Instructor in Elementary Education, Teachers College, and Supervisor in City Schools, Bellingham (Wash.), 1924–25; Instructor in Special Case Work with Problem Children, Bureau of Educational Service, Teachers College, Columbia, 1925–26; Director of Elementary Education, City Schools, Pasadena, since 1926; Instructor, University of California, Extension Division, 1927–29.

Milliken, Margaret Frances (123) Perry, Menlo Heights-*2653*
Instructor in Economics [(PA 3193W)

A.B., Vassar, 1922. At Stanford, 1923–26, and since 1927.

Mills, Louis David (123) 215 Coleridge, P-p (PA 1788)
Lecturer in Metallurgy of Gold and Silver

A.B., Stanford, 1901.

†Milne, William Edmund (123) 656 Channing, P* (PA 1166M)
Acting Professor of Mathematics

A.B., Whitman, 1912; A.M., Harvard, 1913, Ph.D., 1915. Graduate Assistant, Harvard, 1913–15; Instructor in Mathematics, Bowdoin, 1915–16, Assistant Professor, 1916–18; Professor of Mathematics, University of Oregon, 1919–28.

Mirrielees, Edith Ronald (23) 534 Lasuen-*926* (PA 1746J)
Associate Professor of English

A.B., Stanford, 1907. At Stanford since 1909.

†Mitchell, John Pearce (1234) 235 Embarcadero, P* (PA 722)
Registrar, and Professor of Chemistry

A.B., Stanford, 1903, A.M., 1904, Ph.D., 1909. Student, University of Leipzig, 1904–5. At Stanford, 1903–4, and since 1905.

†Moore, Arthur Russell (4) 133 Third St., Pacific Grove-pg
Lecturer in General Physiology (Hopkins Marine Station)

A.B., Nebraska, 1904; Ph.D., California, 1911. Assistant Professor of Physiology, California, 1911–13; Associate Professor, Bryn Mawr, 1913–16; Lecturer in Physiology, Woods Hole (Mass.), Summer Sessions, 1916–20; Professor of Physiology, Rutgers, 1916–26; Professor of General Physiology, University of Oregon, since 1926.

Moore, Myrtle (1234) Menlo Heights* (PA 1243M)
Secretary to the Registrar

Ph.B., University of Chicago, 1922. At Stanford since 1925.

†Moreno, Halcott Cadwalader (123) 684 Mirada (PA 2785)
Professor of Engineering Mathematics

A.B., University of Georgia, 1893, A.M., 1894, B.L., 1896; Ph.D., Clark, 1900. Tutor in Mathematics, University of Georgia, 1893–97; Scholar and Fellow in Mathematics, Clark University, 1897–1900, Assistant in Mathematics, 1900–1901. At Stanford since 1901.

†Morgan, Theodore Harding (123) 243 Waverley, P-*2235* (PA 1757J)
Assistant Professor of Electrical Engineering

A.B., Stanford, 1920. Foreman, Foundation Company, Victoria (B.C.), 1917–19; Testing Engineer, Inspiration Consolidated Copper Company, Inspiration (Ariz.), 1920–21; Engineer, Great Western Power Company, San Francisco, 1921–22, and summers, 1923–26. At Stanford since 1922.

†Morris, Laird M. (123) 2848 Washington, SF-sf (Walnut 3312)
Clinical Instructor in Medicine

M.D., California, 1916. Lieutenant, M.C., U.S.N., 1917–19; Assistant Resident Physician, Peter Bent Brigham Hospital, Boston, 1920; Assistant in Medicine, University of California Medical School, 1921–22, Instructor in Medicine, 1922–23. At Stanford since 1924.

†Morrison, Stanley (1234) 663 Lowell, P* (PA 2875J)
Associate Professor of Law

A.B., Yale, 1915; LL.B., Harvard, 1919. Law Secretary to Justice Oliver Wendell Holmes, United States Supreme Court, Washington (D.C.), 1919–20; in practice of law with McCutcheon, Olney, Mannon, and Greene, San Francisco, 1920–23. At Stanford since 1924.

†Morse, Harry Wheeler (12) Menlo Heights-*840* (PA 3379J)
Lecturer in Metallurgy

A.B., Stanford, 1897; Ph.D., Leipzig, 1902. Instructor and Assistant Professor of Physics, Harvard University, 1902–12; Lecturer in Chemistry, University of California, 1912–13; Consulting Chemist and Metallurgist since 1913.

Morse, Helen Benn (234) 535 Salvatierra-*1051* (PA 933)
Cataloguer, Library

A.B., Wellesley, 1907; B.S., Simmons College Library School, 1919. Graduate Student, Radcliffe, 1908–9; Cataloguer, University of Minnesota Library, 1919–20, 1921–22, 1924–28, Radcliffe College Library, 1920–21, Brown University Library, 1923–24. At Stanford since 1929.

†Moser, Charles (123) 441 Foothill Road* (PA 2287)
Professor of Civil Engineering, and Secretary of the Faculty of the School of Engineering

C.E., Ohio Northern University, 1902; A.B., Stanford, 1908. At Stanford since 1908.

Mosher, Clelia Duel (123) 764 Santa Ynez-*125* (PA 32)
Professor of Personal Hygiene, and Medical Adviser of Women

A.B., Stanford, 1893, A.M., 1894; M.D., Johns Hopkins, 1900. Assistant in Hygiene, Stanford University, 1893–94, Instructor, 1894–96; Externe in the Johns Hopkins Hospital Dispensary, and Gynecological Assistant in Dr. Howard A. Kelly's Sanatorium, Baltimore (Md.), 1900–1901; Physician, Palo Alto, 1901–10; Medical Investigator for the Children's Bureau; Assistant Medical Adviser and later Associate Medical Director, Bureau of Refugees and Relief, American Red Cross, Paris, France, 1917–19. At Stanford, 1893–96, and since 1910.

†Murray, Augustus Taber (24) Kingscote-*953* (PA 3452)
Professor of Classical Literature

A.B., Haverford, 1885; Ph.D., Johns Hopkins, 1890. Fellow in Johns Hopkins University, 1887–88; Professor of Greek, Earlham College, 1888–90; Student, Universities of Leipzig and Berlin, 1890–91; Professor of Greek, Colorado College, 1891–92; Federal Food Administrator for Northern Unit of Santa Clara County, California, 1918; Annual Professor in the American School of Classical Studies, Athens, 1922–23. At Stanford since 1892.

MURRAY, KATHERINE (1234) 1011 Fulton, P-p (PA 1219J)
Secretary, Psychology
At Stanford since 1918.

MURRAY, MARGARET (1234) 1011 Fulton, P* (PA 1219J)
Secretary to the Comptroller
At Stanford since 1916.

†NAGEL, GUNTHER WILLIBALD (1234) 2705 Buchanan, SF-sf (West 7518)
Clinical Instructor in Surgery
A.B., Stanford, 1917, M.D., 1921; M.Sc. (in Surgery), University of Minnesota, 1926. Senior Resident in Medicine, Stanford University Hospital, 1921–22; Fellow in The Association of Residents and Ex-Residents of The Mayo Clinic, since 1922; Resident Surgeon, St. Mary's Hospital, Rochester (Minn.), 1925–26; First Assistant to Dr. Judd, Rochester (Minn.), 1926–28. At Stanford since 1928.

NAGEL, LAURA INGEBORG (1234) 1248 Waverley, P*
Recorder, Registrar's Office
A.B., Stanford, 1904, A.M., 1905. At Stanford, 1908–9, and since 1919.

†NEEDHAM, JOSEPH (4) Pacific Grove-pg
Acting Professor of Physiology (Hopkins Marine Station)
B.A., Cambridge, 1921, M.A., 1924, Ph.D., 1924. Benn Levy Student in Biochemistry, Cambridge, 1922–24; Fellow of Gonville and Caius College, Cambridge, since 1924; Senior Demonstrator in Biochemistry, Cambridge, since 1928.

†NELSON, ROY F. (123) 698 Calmar, Oakland-o (Glencort 3729)
Clinical Instructor in Surgery (Otology, Rhinology, Laryngology)
A.B., Knox, 1919; M.D., Stanford, 1924. Senior Interne, Lane and Stanford University Hospitals (Otolaryngology), 1924–25, Resident, 1925–26; Certificate, American Board of Otolaryngology, 1926; Staff Surgeon, Otolaryngology, Highland Hospital, Oakland; on Staff, Peralta Hospital; Consultant in Endoscopy, Baby Hospital, Oakland. At Stanford since 1924.

†NEVERS, ERNEST (12) 551 Tennyson, P*
Instructor in Physical Education and Hygiene
At Stanford since 1928.

†NEWELL, ROBERT REID (1234) 50 Yerba Buena, SF-sf (Lockhaven 2647)
Associate Professor of Medicine (Radiology)
M.D., California, 1916. Assistant in Medicine, University of California Medical School, 1917. At Stanford since 1920.

†NICHOLS, JOHN RALPH (123) 251 Lincoln, P* (PA 2669)
Acting Instructor in Citizenship
B.S., Oregon State Agricultural College, 1922; A.M., Stanford, 1925. Commandant, Seale Military Academy, 1923; Principal, Grammar School, Cutler, 1923–24, Santa Cruz, 1925–26, Pittsburg, 1926–28.

†NIEBEL, HERBERT LEE (123) 1455 Webster, P-p (PA 1648)
Assistant Medical Adviser of Men
A.B., Stanford, 1914, M.D., 1923. At Stanford since 1927.

†VAN NIEL, CORNELIS BERNARDUS (234) Dolores and Fourteenth, Carmel-c
Acting Associate Professor of Microbiology [(Carmel 726)
(Jacques Loeb Laboratory)
Chem. Eng., Delft (Holland), 1923, D.Sc., 1927. Conservator, Laboratory for Microbiology, Delft, 1923–28.

†Niles, Alfred Salem (123) 827 Lincoln, P* (PA 2573W)
Professor of Aëronautic Engineering

A.B., Johns Hopkins, 1915; B.S., Massachusetts Institute of Technology, 1917; B.S., Harvard, 1917. Assistant in Civil Engineering, Massachusetts Institute of Technology, 1917–18; Chief of Structures Branch, Airplane Section, Engineering Division, U.S. Army Air Service, 1921–27. At Stanford since 1927.

Nye, Helena May (123) 281 Addison, P* (PA 670J)
Instructor in German

A.B., Stanford, 1905, A.M., 1908. At Stanford since 1921.

†Oliphant, Herman (4) Kingscote
Acting Professor of Law

A.B., University of Indiana, 1909; J.D., University of Chicago, 1914. Instructor in Commercial Law, University of Chicago, 1914–15, Assistant Professor, 1915–16, Lecturer on Bankruptcy, 1914–16, Lecturer on Public Service Companies, 1915–16, Assistant Professor of Law, 1916–17, Associate Professor, 1917–19, Professor, 1919–21; Professor of Law, Columbia University, since 1921.

†Oliver, Harry Reeves (123) 1135 Greenwich Terrace, SF-sf
Lecturer on Military Medicine [(Graystone 3714)

M.D., Cooper Medical College, 1898. Assistant in Pathology, Cooper Medical College, 1898–1904, Instructor, 1904–6, Assistant Professor, 1906–11, Associate Professor of Clinical Pathology, 1911–12, Serologist, since 1912; Major, M.C., U.S.A.; Pathologist, Mt. Zion Hospital, since 1923. At Stanford since 1909.

†Oliver, Jean Redman (1234) 1246 Lombard, SF-sf (Graystone 7998)
Professor of Pathology

A.B., Stanford, 1911, M.D., 1914. Assistant in Pathology and Bacteriology, Rockefeller Institute for Medical Research, 1916–18, Associate, 1919; First Lieutenant and Major, M.C., U.S.A., Camp Meade (Md.); Group Laboratory Officer, Justice Hospital Group, Toul, France; Detailed on Medical History of the War, Central Medical Department Laboratory, Dijon, France, and Surgeon General's Office, Washington (D.C.), 1917–19. At Stanford, 1914–16, and since 1919.

†Olsen, Louis S. (4) 321 Fulton, P-p (PA 666)
Acting Instructor in Public Health

A.B., Stanford, 1914, Engineer, 1915. Health Officer, Palo Alto, since 1917.

†O'Neill, Arthur Aloysius (123) 756 Page, SF-sf (Hemlock 2361)
Assistant Clinical Professor of Medicine

M.D., Cooper Medical College, 1891. Assistant Surgeon, Cooper Medical College Clinic, 1893; Assistant in Diseases of the Skin, San Francisco Polyclinic, 1902–7; in charge of Isolation and Plague Hospitals, 1907–10, of Isolation Hospital, 1912–17; City Physician, San Francisco, since 1917; Surgeon, U.S.P.H. Reserve, Consultant, Communicable Diseases, 1919. At Stanford since 1913.

Ophüls, Louise (1234) 2116 Pacific, SF-sf (Walnut 5255)
Librarian, Lane Medical Library

At Stanford since 1910.

†Ophüls, William (1234) 2398 Sacramento, SF-sf (Walnut 1741)
Dean of the School of Medicine and Professor of Pathology

M.D., University of Göttingen, 1895. Assistant at the Pathologic Institute at Göttingen, 1896–97; Professor of Pathology and Bacteriology, University of Missouri, 1897–98; Professor of Pathology and Bacteriology, Cooper Medical College, 1898–1912; Pathologist, Lane Hospital, since 1898; Instructor in Pathology, Training School for Military Officers, U.S.A., March to December, 1918. At Stanford since 1909.

†Osborne, George Edward (123) 669 Cabrillo* (PA 2386W)
Professor of Law

A.B., California, 1916; LL.B., Harvard, 1919, S.J.D., 1920. Assistant Professor of Law, West Virginia University, 1920–21; Acting Assistant Professor of Law, Stanford University, Summer Quarter, 1921; Assistant Professor of Law, University of Minnesota, 1921–23; Acting Professor of Law, Columbia University, Summer Session, 1923, Chicago, Summer Quarter, 1927. At Stanford since 1923.

Ostroff, Robert Allison (123) 1007 Sutter, SF-sf (Franklin 5078)
Clinical Instructor in Surgery

A.B., Nevada, 1915; M.D., Stanford, 1919. Interne, San Francisco Hospital, 1917–18; Senior Interne in Surgery, Lane Hospital, 1918–19. At Stanford since 1923.

Owen, Lillian Caroline (1234) 553 Salvatierra* (PA 3318W)
Secretary, Graduate School of Business

A.B., Stanford, 1920. Executive Assistant to Appointment Secretary, Stanford University, 1922–25. At Stanford since 1922.

†Owens, William Brownlee (1234) 593 Alvarado (PA 1170W)
Professor of Law

LL.B., Stanford, 1915. At Stanford, 1915–16, and since 1920.

†Palmateer, Theron Josiah (123) 1028 Cowper, P-p (PA 1679J)
Teaching Specialist in Machine Shop Practice

Apprentice with Sibley & Ware, South Bend (Ind.); Journeyman Machinist, 1896–1905, with R. Hoe & Co., New York, Columbus Machine Works, Columbus (Ohio), Elms Engineering Works, Chicago, Western Gas Engine Works, Mishawaka (Ind.), Webster Iron Works, Bakersfield (Calif.), R. S. Hunkins, San Jose (Calif.). At Stanford since 1904.

Palmer, Caroline Bell (123) 2557 Clay, SF-sf (Walnut 5517)
Associate Clinical Professor of Surgery (Anesthetics)

M.D., Cooper Medical College, 1906. Chief Anesthetist, Lane Hospital, since 1909. At Stanford since 1916.

†Park, Charles V. (1234) 1080 Emerson, P-p (PA 1188W)
Assistant Librarian

A.B., Stanford, 1909. Certificate, New York Public Library, Library School, 1915. At Stanford since 1909.

†Parks, George Sutton (123) 665 Alvarado (PA 2924J)
Assistant Professor of Chemistry

B.S., Washington, 1915, M.S., 1916; Ph.D., California, 1919. Instructor in Chemistry, California Institute of Technology, 1919–20. At Stanford since 1920.

Parrott, James Clifford (123) 2201 Francisco, SF-sf (Fillmore 8474)
Clinical Instructor in Pediatrics

M.D., Stanford, 1920. At Stanford since 1927.

†Patchett, Ulysses Arnold (1) 558 Tennyson, P* (PA 1946R)
Instructor in Mechanical Engineering

B.S., University of California, 1925, M.S., 1926. Assistant in Mechanical Engineering, University of California, 1926–27. At Stanford since 1927.

†Peirce, George James (134) 281 Embarcadero, P-65 (PA 1743J)
Professor of Botany and Plant Physiology

S.B., Harvard, 1890; A.M., and Ph.D., Leipzig, 1894. Assistant in Botany, Harvard University and Radcliffe College, 1890–92; Parker Fellow in Harvard University, studying in Bonn, Leipzig, and Munich, 1892–94; Assistant Professor of Botany, Indiana University, 1895–97; Acting Professor of Botany, University of Wisconsin, Second Semester, 1910–11. At Stanford since 1897.

[†Pelz, Victor H.
Associate Professor of Business Organization (Graduate School of Business)]

B.S., Northwestern, 1916, A.M., 1917. Fellow in Economics, Northwestern, 1916–17; Research Assistant, Chicago Sales Managers' Association, 1916–17; Assistant Labor Manager, National Wholesale Tailors' Association, Summer, 1920; Instructor in Economics, University of Minnesota, 1919–21; Assistant Professor of Business Administration, Extension Division, University of Wisconsin, 1921–22; Professor of Marketing, Tulane University, 1922–25; Acting Professor of Marketing, Northwestern University, Summer Session, 1923. At Stanford since 1925.

†Pettigrew, Moses W. (123) 1060 High, P* (PA 612M)
Associate Professor of Military Science and Tactics (Field Artillery)

Student, Utah State School of Mines, 1914–17. At Stanford since 1924.

†Pettit, Albert Victor (1234) 1169 Bay, SF-sf (Ordway 5554)
Assistant Clinical Professor of Obstetrics and Gynecology

A.B., Stanford, 1915, M.D., 1919. Senior Interne, Obstetrics and Gynecology, Lane Hospital, 1919–20, Resident, 1920–21, Chief of Women's Clinic, 1921–25; Assistant Visiting Obstetrician and Gynecologist, San Francisco Hospital, since 1926. At Stanford since 1920.

†Pierson, Philip Hale (1234) 3481 Washington, SF-sf (Fillmore 4931)
Associate Clinical Professor of Medicine (Tuberculosis)

A.B., Yale, 1908; M.D., Harvard, 1913. House Officer, Massachusetts General Hospital, 1914–15. At Stanford since 1916.

†Pischel, Dohrmann Kaspar (1234) 1815 California, SF-sf
Clinical Instructor in Surgery (Ophthalmology) [(Ordway 5698)

A.B., California, 1918; M.D., Stanford, 1923. Assistant Visiting Otolaryngologist, San Francisco Hospital, 1923–24; Hospitant, University Eye Clinic, Vienna, 1924–26; Assistant Ophthalmologist, University of California, 1926–28. At Stanford since 1928.

Potter, Margaret (1234) 415 Bellevue, Oakland-o (Glencort 1093)
Cataloguer, Lane Medical Library

B.S., California, 1914. At Stanford since 1919.

Powell, Herbert Harry (23) 1051 Taylor, SF-sf (Franklin 1941)
Lecturer in Semitic Languages

Ph.B., Taylor, 1898; A.M., Columbian (now George Washington), 1901; B.D., Virginia Theological Seminary, 1901; Ph.D., California, 1905; D.D., General Theological Seminary, 1912. Professor of Old Testament Languages and History, Church Divinity School of the Pacific, since 1900, Theology and Apologetics, 1908–25, Dean, since 1923; Lecturer in Semitic Languages, University of California, 1919–20. At Stanford since 1925.

†Price, Henry Ferris (4) 247 Toyon (PA 2900)
Acting Instructor in Mathematics

A.B., Swarthmore, 1906; A.M., University of Pennsylvania, 1912, Ph.D., 1915. Fellow in Mathematics, Pennsylvania, 1913–14; Professor of Mathematics, Pacific University, since 1920; Instructor in Mathematics, University of Oregon, Portland Center, since 1920.

†Proctor, William Martin (123) 747 Dolores (PA 3223)
Professor of Education

A.B., Whitman, 1901; A.M., Stanford, 1916, Ph.D., 1919. Teacher of History and Civics, Cheney (Wash.) State Normal School, 1909–10; Professor of Education, Pacific University, Forest Grove, Oregon, 1911–15, Dean of Faculty, 1914–15; Lecturer, Harvard Summer Session, 1922; Lecturer in Secondary Education, Harvard University, 1923–24; Lecturer, Columbia University, Summer Session, 1924, University of Minnesota, Summer Session, 1925. At Stanford since 1916.

†Proescher, Frederick (123) Agnew State Hospital, Agnew-a
Lecturer in Therapeutics [(Ballard 1728)

M.D., University of Basel, 1899. Assistant, Institut für experimentelle Therapie, Frankfort (Germany), 1900–1902; Chief Bacteriologist, Hoechst Farbenfabrik, 19·3–4; Postgraduate work, Pathological Institutes of Berlin and Vienna, Pasteur Institute, Paris, 1903–4; Pathologist, Mercy Hospital, Pittsburgh, 1906–7; Pathologist, Allegheny Hospital, Pittsburgh, 1907–13; Physician-in-Chief to Pittsburgh City Hospital, 1913–14; Chief, Pathological Laboratory, and Captain, U.S.A., Camp Sherman, 1917–18; Pathologist, Agnew State Hospital, since 1922.

Putnam, Dorothy (1234) 625 Guinda, P* (PA 1279W)
Secretary, School of Education

A.B., Stanford, 1916. Assistant in History, Stanford University, 1916–17. At Stanford since 1916.

Rawlins, Aubrey Gatliff (123) Olympic Club, SF-sf (Prospect 4400)
Clinical Instructor in Surgery (Otology, Rhinology, Laryngology)

A.B., Stanford, 1921, M.D., 1925. Interne, Stanford Hospital, 1924–25; House Officer in Oto-rhino-laryngology, San Francisco Hospital, 1925–27; Aurist, Southern Pacific Hospital; Assistant Visiting Oto-rhino-laryngologist, San Francisco Hospital, and Visiting Oto-rhino-laryngologist, Laguna Honda Home; Assistant in Instruction, Surgery, Stanford, 1926–28. At Stanford since 1926.

Rea, Marion Hague (Mrs.) (4) Kingscote-*992* (PA 1386M)
Acting Medical Adviser of Women

A.B., Vassar, 1909; M.D., Woman's Medical College of Pennsylvania, 1915. Instructor in Physics and Chemistry, Fairport High School, 1909–11; Interne, Philadelphia General Hospital, 1915–16; Assistant Physician, Boston Psychopathic Hospital, 1916–17; Chief Resident Physician, Woman's College Hospital, 1917–18; Instructor in Medicine, Woman's Medical College, 1917–23; Resident Physician, Bryn Mawr, 1917–19, 1923–24; Assistant Visiting Chief, Philadelphia General Hospital, since 1917; Instructor in Medicine, University of Pennsylvania, since 1921, Medical Director of Physical Education for Women, since 1922; Chief in Medicine, Woman's Hospital, since 1922.

†Read, Jay Marion (123) 1461 Seventeenth Ave., SF-sf (Montrose 2219)
Associate Clinical Professor of Medicine

B.S., California, 1912, M.S., 1913; M.D., Stanford, 1915. Assistant, Stanford Medical Service, San Francisco Hospital, since 1916; Captain, M.R.C., U.S.A., August 1917 to January 1919. At Stanford since 1916.

†Redding, William Francis (4) 255 Toyon (PA 2900)
Acting Associate Professor of Education

A.B., Rhode Island State College, 1913; A.M., Brown University, 1920. Instructor in Ponce (P.R.) High School, 1913–14; Assistant Professor of Mathematics, University of Porto Rico, 1914–15; Instructor in Physics, Brown University, 1919–20; Head of Science Department, Miami (Ariz.) High School, 1921–24; Head of Advisers' Department, Providence (R.I.) High School, since 1924; Lecturer, Brown University Extension Department, 1927–28.

†Redfield, Robert (4) Willow Road, P-R.F.D. 1, Box 41, p (PA 3969J)
Acting Assistant Professor of Psychology

Ph.B., University of Chicago, 1920, J.D., 1921, Ph.D., 1928. Instructor in Sociology and Anthropology, University of Colorado, 1925–26; Research Fellow, Social Science Research Council, 1926–27; Instructor in Anthropology, University of Chicago, 1927–28, Assistant Professor, since 1928; Instructor in Sociology, Cornell University, Summer Quarter, 1928.

†Rehfisch, John Morse (123) 1940 Scott, SF-sf (Fillmore 3639)
Assistant Clinical Professor of Medicine (Radiology)

M.D., University of California, 1915. Assistant in Pathology, University of California, 1915–17, Instructor in Medicine, 1919–23. At Stanford since 1927.

†Reichert, Frederick Leet (1234) 15 Seventh Ave., SF-sf (Skyline 4804)
Associate Professor of Surgery

Ph.B., Franklin and Marshall College, 1916; M.D., Johns Hopkins University, 1920. Research Fellow, Hunterian Laboratory of Experimental Surgery, 1920–21; Assistant Resident Surgeon, Johns Hopkins Hospital, 1921–24. Resident Surgeon, 1924–26, Instructor in Surgery, 1922–26. At Stanford since 1926.

†Reid, Elliott Gray (123) 498 Amherst, M* (PA 3437)
Professor of Aërodynamics

B.S., Michigan, 1922, M.S., 1923. With National Advisory Committee for Aëronautics, Langley Field, 1922–27. At Stanford since 1927.

Reilly, Julia Margaret (234) 332 Forest, P-*1277* (PA 1815)
Assistant Director (Encina Commons)

A.B., University of South Dakota, 1926. At Stanford since 1929.

Remele, Miriam Frances (1234) 367 Addison, P* (PA 711J)
Editorial Secretary, Registrar's Office

At Stanford since 1920.

†Rendtorff, Karl Gustav (123) 646 Alvarado-*1302* (PA 3082W)
Professor of German

A.M., Stanford, 1894, Ph.D., 1896. Student, University of Giessen, 1884–85, University of Kiel, 1885–91. At Stanford since 1894.

Rethwilm, Lorruli Anna (123) 2217 Webster, SF-sf (West 0399)
Clinical Instructor in Surgery (Anesthesia)

A.B., Washington University, 1913; M.D., Stanford, 1917. Assistant in Surgery, Stanford, 1921–27. At Stanford since 1921.

†Reynolds, Charles Nathan (123) 525 Bowdoin, M-*1062* (PA 3825J)
Assistant Professor of Sociology (Economics)

A.B., University of Oregon, 1913, A.M., 1922; Ph.D., Stanford, 1927. Instructor in Sociology, University of Oregon, 1923–25; Instructor in Citizenship and Economics, Stanford, 1925–27; Acting Instructor in Education, University of California, Intersession, 1926; Acting Professor of Sociology, University of Oregon, Summer Session, 1927; Professor of Economics, University of Hawaii, 1927–28. At Stanford, 1925–27, and since 1928.

†Reynolds, Leon Benedict (123) 853 Middlefield, P-*1826* (PA 394R)
Professor of Hydraulic and Sanitary Engineering

A.B., Hillsdale, 1906; A.B., Stanford, 1909. Student, Cornell University, 1911–12; Assistant Engineer, Burns & McDonnell, Kansas City (Mo.), 1909–11, 1912–19; Member of firm, Burns & McDonnell Engineering Co., Kansas City (Mo.), 1920–23. At Stanford since 1923.

†Reynolds, Lloyd Robinson (123) 2762 Filbert, SF-sf (Walnut 0619)
Clinical Instructor in Surgery (Genito-Urinary)

A.B., Stanford, 1915, M.D., 1920. Assistant in Surgery, Stanford Medical School, 1921–22; Fellow in Surgery, Peter Bent Brigham Hospital, Boston, 1923. At Stanford since 1921.

†Rich, Willis Horton (123) 212 Byron, P*
Lecturer in Zoölogy

B.S., Lombard, 1905; A.B., Stanford, 1909, A.M., 1918, Ph.D., 1924. Instructor in Biology, University of Southern California, 1907–8; Assistant in Zoölogy, Stanford, 1909–10, Instructor in Zoölogy, 1913–14, 1917–18, Instructor in Physiology, 1916–17; with California Fish and Game Commission, 1910–13; Scientific Assistant, U.S. Bureau of Fisheries, 1914–22, Chief of Division of Inquiry, 1922–26, Chief Investigator, Salmon Fisheries, since 1926; Member, International Committee for Marine Fishery Investigation, 1922–26; Member, Pacific Salmon Investigation Federation, since 1926; Member, United States Subcommittee on the Oceanography of the Pacific, Pacific Science Congress, since 1926; Member, Committee on Agriculture, National Research Council, since 1927.

[Ricker, Christine Isabelle 615 Lasuen-*1069* (PA 302)
Assistant Director (Stanford Union)]

B.S., Simmons College, 1917. At Stanford since 1922.

†Rixford, Emmet (1234) 1795 California, SF-sf (Graystone 2030)
Professor of Surgery

B.S., California, 1887; M.D., Cooper Medical College, 1891. Adjunct Professor of Surgery, Cooper Medical College, 1893-98, Professor, 1898–1912; Visiting Surgeon, Lane Hospital, 1895–1912, City and County Hospital, San Francisco, since 1894; Instructor in Surgery, Training School for Military Officers, U.S.A., March to December, 1918. At Stanford since 1909.

†Robbins, Carl Burton (123) 610 University, P-*2564* (PA 843)
Instructor in Economics

A.B., Stanford, 1924, A.M., 1925; M.B.A., Harvard, 1927; Ph.D., Stanford, 1928. At Stanford since 1927.

†Robinson, Edgar Eugene (1234) 591 Salvatierra-*1438* (PA 1511)
Professor of American History, and Director of Citizenship

A.B., Wisconsin, 1908, A.M., 1910. Assistant in History, University of Wisconsin, 1908–9, Fellow in American History, 1909–10; Assistant Professor of History, Carleton College, 1910–11; Instructor in History, University of Minnesota, Summer Session, 1912, Resident Lecturer, 1915–16; Assistant Professor of History, University of Michigan, Summer Session, 1916; Assistant Educational Director, S.A.T.C., 1918; Visiting Professor of American History, Yale University, 1919–20; Lecturer in American History, University of California, 1924; Professor of History, Columbia University, Summer Session, 1926. At Stanford since 1911.

†Rodin, Frank H. (1234) 2205 Sacramento, SF-sf (Walnut 0797)
Clinical Instructor in Surgery (Ophthalmology)

A.B., Manitoba, 1916, M.D., C.M., 1920. Interne, St. Boniface General Hospital, 1918–19; House Surgeon, Winnipeg General Hospital, 1919–20; Eye, Ear, Nose, and Throat Clinics, Washington University, 1923–24; Senior Interne, Lane Hospital, 1924–26; Consultant in Ophthalmology and Otology, San Francisco Board of Health, since 1925. At Stanford since 1924.

†Roelofs, Howard Dykema (123) Santa Cruz Ave.-*625* (PA 1973W)
Assistant Professor of Philosophy

A.B., Michigan, 1915, A.M., 1916; Ph.D., Harvard, 1925. Fellow in Philosophy, Michigan, 1916–17, Instructor in Rhetoric, 1921–23; Assistant in Philosophy, Harvard, 1924–25; Assistant Professor of Philosophy, University of California at Los Angeles, 1925–27. At Stanford since 1927.

†Rogers, Austin Flint (123) 549 Salvatierra-*87* (PA 1321)
Professor of Mineralogy

A.B., Kansas, 1899, A.M., 1900; Ph.D., Columbia, 1902. Assistant in Mineralogy, University of Kansas, 1898–1900; Assistant Geologist, University Geological Survey of Kansas, 1898–1900, 1903; Fellow in Mineralogy, Columbia University, 1900–1902, Tutor in Mineralogy, 1902–5. At Stanford since 1905.

†Rogers, Frederick John (134) 794 Melville, P* (PA 1204W)
Professor of Physics

M.S., Cornell, 1891. Instructor in Physics, Cornell University, 1892–1900. At Stanford since 1900.

Rogers, William Lister (123) Olympic Club, SF-sf (Prospect 4400)
Clinical Instructor in Surgery (San Francisco Hospital)

A.B., Stanford, 1923, M.D., 1926. At Stanford since 1927.

Rooney, Margaret (1234) 176 Bryant, P-*2155* (PA 2708W)
Secretary, Food Research Institute

At Stanford since 1925.

†Ross, Chester J. (4) 2607 Etna, Berkeley-b (Berkeley 2757)
Assistant Superintendent, Lane and Stanford Hospitals
At Stanford since 1917.

†Ross, Perley Ason (1234) 1830 Cowper, P* (PA 3063)
Professor of Physics
A.B., Stanford, 1908, A.M., 1910, Ph.D., 1911. Acting Professor of Physics, Cornell, 1926–27. At Stanford since 1908.

†Roth, Almon Edward (1234) 462 Santa Teresa* (PA 3036)
Comptroller
A.B., Stanford, 1909, J.D., 1912. At Stanford since 1919.

†Roth, Earle Frederick (123) 734 Waverley, P* (PA 293)
Assistant Medical Adviser of Men
A.B., Stanford, 1915, M.D., 1921. At Stanford since 1927.

[†Rowell, Chester Harvey 149 Tamalpais Road, Berkeley-b (Ashberry 2200)
Lecturer in Political Science (International Relations)]
Ph.B., University of Michigan, 1888. Graduate Student, University of Michigan, 1888–89; Student, University of Halle, University of Berlin, 1892–95; Regent, University of California, since 1913.

Rowland, Mary De (1234) 513 Salvatierra-*867* (PA 1025)
Secretary, Lower Division
At Stanford since 1923.

Russell, Francis Theresa (Mrs.) (124) 534 Lasuen-*102* (PA 1746W)
Associate Professor of English
Ph.B., State University of Iowa, 1895; Ph.D., Columbia, 1920. Graduate Student, Radcliffe College, 1898–99. At Stanford since 1905.

†Russell, Frank Marion (4) 119 Alvarado, Berkeley-b (B 5133W)
Acting Associate Professor of Political Science
A.B., Stanford, 1912, A.M., 1913, Ph.D., 1925. Instructor, University of Nevada, 1916; Assistant Professor, State College of Washington, 1917–18, Associate Professor, 1918–19; Acting Associate Professor, University of Washington Summer Session, 1919; Instructor in History, Stanford, 1919–20, Acting Assistant Professor, 1920–21; Lecturer, University of California, 1921–22, Assistant Professor, 1922–25, Associate Professor, since 1925, Dean of Undergraduate Division, since 1928.

†Ryan, Harris Joseph (123) 525 Embarcadero, P-*K* (PA 1075)
Professor of Electrical Engineering
M.E., Cornell, 1887; LL.D., California, 1925. With Western Engineering Co., Lincoln (Nebr.), 1887–88; Instructor in Physics, Cornell University, 1888–89, Assistant Professor of Electrical Engineering, 1889–92, Associate Professor, 1892–95, Professor, 1895–1905; Judge, Board of Awards, World's Fair, Chicago, 1893; U.S. Government Delegate, International Electrical Congress, St. Louis Exposition, 1904; Consulting Electrical Engineer, Los Angeles Aqueduct Power Project, 1909–23; President, American Institute of Electrical Engineers, 1923–24. At Stanford since 1905.

†Ryfkogel, Henry Anthon Lewis (123) 23 Belmont, SF-sf
Lecturer on Surgery (San Francisco Hospital) [(Lockhaven 2747)
M.D., California, 1894. Instructor in Anatomy, University of California, 1894–98, Instructor in Clinical Pathology, Medical Department, 1898–1900, in Bacteriology, 1900–1906, in Surgical Pathology, 1906–7; Surgical Chief, San Francisco Polyclinic, and Visiting Surgeon, San Francisco Hospital, since 1904. At Stanford since 1919.

SANTES, MARIE (1234) 513 Salvatierra-*1274* (PA 1025)
Cataloguer, Hoover War Library

A.B., Carleton, 1911; B.L.S., New York State Library School, 1926. High School Teacher, 1911–13; Student, New York State Library School, 1916–18; Temporary Assistant, Newark (N.J.) Free Public Library, Summer, 1917; Cataloguer, University of Minnesota Library, 1918–23. At Stanford since 1923.

†SCATTERGOOD, EZRA FREDERICK (123) 524 Muirfield Rd., Los Angeles-la
Lecturer in Electrical Engineering [(Oregon 2205)

B.S., Rutgers, 1893, M.S., 1896; M.M.E., Cornell, 1899. Instructor in Mathematics and Electrical Science, Rutgers; Fellow in Electrical Engineering, Cornell; Professor of Electrical Engineering, Georgia School of Technology; Consulting Electrical Engineer, Los Angeles; Chief Electrical Engineer and General Manager, Bureau of Power and Light of the City of Los Angeles, since 1909.

†SCHALL, MYRON REED (1234) 815 Cowper, P* (PA 1094J)
Instructor in Physical Education and Hygiene

A.B., Stanford, 1927. At Stanford since 1927.

†SCHALLER, WALTER FRANK (1234) 164 Sea Cliff, SF-sf (Evergreen 5614)
Clinical Professor of Medicine (Neurology)

M.D., Cooper Medical College, 1902. Assistant in Pathology, Cooper Medical College, 1905–6; Assistant Surgeon, U.S.N., 1906–8; Student, Paris, Berlin, Vienna, Karlsruhe, 1909–11; P.A. Surgeon, U.S.N.R.F., June–December, 1917, and October, 1918, to 1926. At Stanford since 1911.

†SCHAUPP, KARL LUDWIG (1234) 45 Walnut, SF-sf (Fillmore 0921)
Associate Clinical Professor of Obstetrics and Gynecology

A.B., Stanford, 1913, M.D., 1916. First Lieutenant, M.R.C., U.S.A., August to December, 1918; Visiting Obstetrician, San Francisco Hospital, since 1919; Visiting Gynecologist, San Francisco Hospital, since 1923; Obstetrician, Franklin Hospital; Director, Out-Patient Obstetrics for City of San Francisco. At Stanford since 1918.

†SCHENCK, HUBERT GREGORY (123) Stanford Union-*1583* (PA 2900)
Assistant Professor of Geology

A.B., Oregon, 1922, A.M., 1923; Ph.D., California, 1926. Associate in Paleontology, University of California, 1923–24. At Stanford since 1924.

[SCHERMERHORN, LORENZ J. *2720* Vallejo, SF-sf (Fillmore 6337)
Clinical Instructor in Pediatrics]

M.D., University of Michigan, 1912. U.S. Army, 1917–19; University of California, Pediatrics Department, 1919–24; Pediatrician, French Hospital, 1924–27. At Stanford since 1925.

†SCHILLING, WALTER (123) 2500 Steiner, SF-sf (Walnut 6250)
Clinical Instructor in Medicine

A.B., California, 1919, A.M., 1920; M.D., Harvard, 1924. Senior Interne in Neuropsychiatry, Lane Hospital, 1924–25, Assistant in Medicine (Neurology), 1925–26; Neurologisches Institute, Psychiatrische Klinik, Allegemeine Poliklinik, Vienna, 1926–27. At Stanford since 1925.

†SCHLICK, MORITZ (4) Stanford Union* (PA 2900)
Acting Professor of Philosophy

Ph.D., Berlin, 1904. Instructor in Philosophy, University of Rostock, 1911–17, Professor, 1917–21; Professor of Philosophy, University of Kiel, 1921–22; Professor of Philosophy, University of Vienna, since 1922.

†SCHULTZ, EDWIN WILLIAM (123) 743 Cooksey Lane (PA 1210)
Professor of Bacteriology and Experimental Pathology

B.S., Winona College, 1913; A.B., Michigan, 1914; M.D., Johns Hopkins, 1917. Special Student in Protozoölogy, School of Hygiene and Public Health, Johns Hop-

kins University, 1919; Fellow in Pathology, Mayo Foundation, Spring and Summer Quarters, 1921–22; Field Director, International Health Board, 1917; First Lieutenant and Captain, M.C., U.S.A., Deputy Commissioner (Major, U.S.A.), American Red Cross, 1917–19; Chief of Laboratory, 33d Division, U.S. Army; Pathologist, Base Hospital No. 42, A.E.F., 1917 18; Chief of Laboratory, A.R.C. Military Hospital No. 9, A.E.F.; Bacteriologist, A.R.C. Commission to Germany; Chief of Bureau of Medical Research, A.R.C. Commission to Poland, 1918–19; John Simon Guggenheim Memorial Fellow in Bacteriology for research abroad, 1925–26. At Stanford since 1920.

SCHULTZE, AGNES WILHELMINA (1234) 345 Forest, P* (PA 3917J)
Assistant Curator, Commission for Relief in Belgium Archive, Hoover War Library

Certificate, Drexel Institute Library School, 1914. Reference Assistant, Carnegie Library, Pittsburgh, 1914–15; First Assistant, Hudson Park, Tremont, Central Branches, New York Public Library, 1915–20; Indexer, American Relief Administration, 1920–26. At Stanford since 1926.

†SCHWARTZ, WILLIAM LEONARD (12) 667 Salvatierra-*572* (PA 1040R)
Assistant Professor of Romanic Languages

A.B., Ohio Wesleyan, 1910; A.M., Stanford, 1920, Ph.D., 1926. Professor of English, Kagoshima Seventh Government College, Japan, 1910–14, Nagasaki Imperial College of Commerce, 1914–19; Professor of French, College of the Pacific, 1919–20; Student, University of Paris, 1921; Lecturer in French, University of Southern California, Summer Session, 1927. At Stanford since 1920.

SCOTT, ELIZABETH (23) 2340 Clay, SF-sf (West 6193)
Instructor in Practice of Nursing

B.S., New York State Teachers College, 1913. Teacher of English, Junior High School, New Jersey, 1914–21; Graduate Student, Columbia University, 1920; Graduate, St. Christopher's Hospital Training School, Philadelphia, 1925; Community Health Center, Children's Aid Society, New York City, 1925. At Stanford since 1929.

†SEARS, JESSE BRUNDAGE (234) 1120 Parkinson, P-*1176* (PA 1927M)
Professor of Education

A.B., Stanford, 1909; Ph.D., Teachers College, Columbia, 1920. Student, University of Chicago, Summer Quarter, 1910; Research Scholar, Teachers College, Columbia University, 1910–11; Instructor in Education, University of Wisconsin, 1909–10; Assistant in Educational Sociology, Teachers College, Columbia University, Summer Session, 1911; Acting Associate Professor of Education, University of Minnesota, 1920–21; Director, Survey of University of Minnesota, Autumn Quarter, 1921–22; Visiting Professor, University of Pennsylvania, Summer Session, 1927. At Stanford since 1911.

†SEARS, KENNETH CRADDOCK (4) 744 Guinda, P*
Acting Professor of Law

A.B., Missouri, 1913; J.D., Chicago, 1915. Assistant Professor, Associate Professor, and Professor, University of Missouri, 1919–25; Visiting Professor, Yale University, 1925–26; Professor, University of Chicago, since 1926.

†SEASHORE, ROBERT HOLMES (4) 355 Kellogg, P-*2782*
Acting Assistant Professor of Psychology

A.B., Iowa, 1923, M.S., 1924, Ph.D., 1925. Instructor in Psychology, Ohio State University, 1925–26; National Research Council Fellow, Stanford, 1926–28; Associate Professor of Psychology, University of Oregon, since 1928.

SEDGWICK, MARY LOUISE (1234) Roble-*1834* (PA 2214)
House Director (Roble Hall)

B.S., Iowa State, 1928. At Stanford since 1928.

†Seitz, Roland P. (123) 21 Frederick, SF-sf (Underhill 8338)
Assistant Clinical Professor of Pediatrics

A.B., Stanford, 1919, M.D., 1923. Senior Interne, Pediatrics, Lane Hospital, 1923–24. At Stanford since 1924.

Sellards, John Armstrong (1234) 344 Serra-*111* (PA 2892)
Dean of Summer Quarter, and Secretary to Stanford National Board

A.B., Illinois, 1912; A.M., Stanford, 1916. At Stanford, 1916–17, 1919–20, 1922–23, and since 1924.

†Sewall, Edward Cecil (1234) 3515 Pacific, SF-sf (Fillmore 4242)
Clinical Professor of Surgery (Otology, Rhinology, Laryngology)

A.B., Stanford, 1898; M.D., Cooper Medical College, 1902. Assistant and Instructor in Ophthalmology, Cooper Medical College, 1901–7, Assistant Professor, 1907–9; Student in Freiburg, 1909–10; Associate Professor of Diseases of Eye, Ear, Nose, and Throat, Cooper Medical College, 1910–12. At Stanford since 1912.

†Seward, Samuel Swayze, Jr. (123) 262 Kingsley, P-p (PA 269R)
Associate Professor of English

A.B., Columbia, 1896, A.M., 1897. Scholar in Literature, Columbia University, 1896–97, Assistant in Literature, 1897–99; Student, Oxford University, 1899–1900; Acting Professor of English, University of Nevada, 1907; Assistant Professor of English, University of California, Summer Session, 1907, University of Oregon, Summer Session, 1908. At Stanford since 1900.

†Shafer, George Daniel (1234) 321 Melville, P-p (PA 3964)
Assistant Professor of Physiology

A.B., Indiana, 1900; A.M., Stanford, 1906; Ph.D., Cornell, 1908. Fellow in Entomology and Invertebrate Zoölogy, Cornell University, 1906–8; Research Assistant, Experiment Station, Michigan Agricultural College, 1908–14, Associate, 1914–17. At Stanford since 1918.

†Shedd, Solon (123) 663 San Juan-*1888* (PA 2824W)
Curator, Branner Geological Library

B.S., Monmouth, 1889; A.B., Stanford, 1896, A.M., 1907, Ph.D., 1910. Instructor in Natural Sciences, State Normal School, Monmouth (Ore.), 1889–94; Assistant Professor of Geology, State College of Washington, 1896–1901, Professor, 1901–25; Geologist, Washington State Geological Survey, 1901–3, Assistant State Geologist, 1909–11, State Geologist, 1921–25; Acting Associate Professor of Geology, Stanford, Summer and Autumn Quarters, 1921, Acting Professor of Geology, Summer Quarter, 1922. At Stanford, 1921, and since 1925.

Sheehan, Maurice (123) 680 Homer, P-p (PA 1504W)
Instructor in Anatomy

M.B.Ch.B., Manchester, 1926, B.Sc., 1928. At Stanford since 1928.

†Shepard, Orson Cutler (123) 626 Middlefield, P* (PA 1290M)
Acting Instructor in Mining and Metallurgy

A.B., Stanford, 1925, Engineer, 1928.

Shepard, William Peacey (23) 433 Powell, SF-sf (Douglas 2004)
Lecturer in Industrial Hygiene

B.S., Minnesota, 1919, M.B., 1920, M.D., 1921, A.M., 1922. Instructor in Public Health and Preventive Medicine, and Assistant Director, Students' Health Service, Minnesota, 1920–23; Special Lecturer in Hygiene, Western Union College (Iowa), 1924.

†Shepardson, Dwight Emerson (1234) 80 Yerba Buena, SF-sf
Clinical Instructor in Medicine [(Montrose 8672)

A.B., Stanford, 1917, M.D., 1921. Resident in Medicine, Lane Hospital, 1922–23. At Stanford since 1922.

†Shepherd, Harold (123) 744 Guinda, P* (PA 1904M)
Professor of Law

A.B., Stanford, 1919, J.D., 1922. Dean of the Law School, University of Wyoming, 1922–23. At Stanford since 1923.

†Sherman, Julius (12) 288 Twenty-ninth Ave., SF-sf (Evergreen 3232)
Clinical Instructor in Medicine

M.D., California, 1916. Interne, Mount Zion Hospital, 1916–17; Voluntary Assistant in Medicine, University of California, 1917–18, Assistant, 1918–21. At Stanford since 1925.

†Sisson, Charles Alexander (23) 208 Oak, P-p
Acting Instructor in English

A.B., University of Kansas, 1923.

Skilling, Hugh Hildreth (23) 334 Stanford Union-*1744* (PA 2900)
Acting Instructor in Electrical Engineering

A.B., Stanford, 1926, Engineer, 1927.

Skogsberg, Tage (1234) 116 Fifteenth, Pacific Grove-pg
Associate Professor of Zoölogy

A.M., Upsala, 1912, Ph.D., 1920. Curator, Zoölogical Institution, Upsala, 1917–20; Upsala University Scholar, Musée Oceanographique of Monaco, 1915; Hopkins Marine Station, 1921; Scientific Assistant, California Fish and Game Commission, 1922; Research Assistant, University of California, 1923–25, Associate in Zoölogy, Second Semester, 1925–26. At Stanford, Summer Quarter, 1925, and since 1926.

†Sloan, William Henry (124) Alta Mesa* (PA 8W2)
Associate Professor of Chemistry

A.B., Stanford, 1903, A.M., 1904. Student, University of Leipzig, 1904–5; Assistant Chemist, San Francisco Board of Health, 1905–6. At Stanford, 1903–4, and since 1906.

†Slonaker, James Rollin (123) 334 Kingsley, P* (PA 451)
Associate Professor of Physiology

B.S., Wisconsin, 1893; Ph.D., Clark, 1896. Fellow in Biology, Clark University, 1893–96; with United States Fish Commission, Woods Hole (Mass.), Summer, 1895; Instructor in Zoölogy, Indiana University, 1896–99, Biological Station, 1896–1900, Assistant Professor of Zoölogy, 1899–1901; Research Assistant in Neurology, University of Chicago, 1901–2, Associate in Neurology, 1902–3. At Stanford since 1903.

Smith, Edward Anderson (123) 545 Bryant, P-*2132* (PA 3115)
Instructor in Physical Education and Hygiene

A.B., Stanford, 1928. At Stanford since 1928.

†Smith, Everett Wallace (34) 556 Alvarado-*678* (PA 1041)
Professor of Journalism, and Director of Publicity

A.B., Stanford, 1899. At Stanford since 1910.

†Smith, Gilbert Morgan (1234) 1808 Waverley, P* (PA 231W)
Professor of Botany

A.B., Beloit, 1907; Ph.D., Wisconsin, 1913; D.Sc., Beloit, 1927. Assistant in Botany, Wisconsin, 1909–10; Instructor in Botany, Pomona, 1910–11; Assistant in Botany, Wisconsin, 1911–12, Instructor, 1912–17, Assistant Professor, 1917–19, Associate Professor, 1919–25; Acting Associate Professor, Stanford, Autumn Quarter, 1923–24. At Stanford, 1923, and since 1925.

†Smith, James Perrin (123) 1335 Cowper, P-p (PA 1218W)
Professor of Paleontology

A.B., Wofford College, 1884; A.M., Vanderbilt, 1886; Ph.D., Göttingen, 1892; LL.D., Wofford College, 1916. Assistant Geologist and Chemist, Arkansas Geological Survey, 1887–90; Assistant Geologist, U.S. Geological Survey, 1895–1906, Geologist since 1906. At Stanford since 1892.

†Smith, Stanley Astredo (123) 2 Finger, RC-Box 176, rc
Associate Professor of Romanic Languages [(Redwood 285W)

A.B., Stanford, 1903, A.M., 1905. Assistant in Romanic Languages, Stanford University, 1903–4, Instructor, 1904–7; Student, Universities of Paris and Madrid, 1906–7; Instructor in French and Italian, University of Washington, 1907–11; Student, Harvard University, 1911–13, Instructor in Romance Languages, 1912–13; Professor of Romance Languages, Reed College, 1913–14; Acting Assistant Professor of French, University of Washington, Summer, 1920, University of California, Summer, 1922; Lecturer in Italian, University of California, 1927–28. At Stanford, 1903–7, and since 1914.

Snell, Elizabeth Burritt (Mrs.) (1234) 1333 Tasso, P* (PA 1718R)
Appointment Secretary

A.B., Stanford, 1908. At Stanford since 1916.

Snodgrass, Katharine (1234) Kingscote* (PA 1386R)
Research Associate, Food Research Institute

A.B., Bryn Mawr, 1915; A.M., Columbia University, 1918. Research Assistant, War Industries Board, 1918–19, Federal Reserve Board, 1919–22; Associate Editor, *New York Journal of Commerce,* 1923. At Stanford since 1924.

†Snyder, John Otterbein (123) 542 Alvarado-*2238* (PA 1081M)
Professor of Zoölogy

A.B., Stanford, 1897, A.M., 1899. Assistant, U.S. Fish Commission, 1897, 1899, 1904, 1915, 1916; Naturalist on U.S.S. "Albatross" engaged in deep sea investigations, 1902, 1906; Expert Ichthyologist, U.S. National Museum, 1914; Fisheries Expert, Fish and Game Commission of California, since 1919; Director, U.S. Fisheries Marine Laboratory, Woods Hole (Mass.), 1926. At Stanford since 1897.

†Spalding, Alfred Baker (1234) 2651 Green, SF-sf (Fillmore 0826)
Professor of Obstetrics and Gynecology

A.B., Stanford, 1896; M.D., Columbia, 1900. House Surgeon, General Memorial Hospital, New York, 1900–1901; Assistant Resident Physician, Sloane Maternity Hospital, New York, 1901–2; Instructor in Obstetrics, University of California, 1902–5, Assistant Professor, 1905–9, Professor, 1909–12. At Stanford since 1912.

Spenner, Irene (Mrs.) (1234) 541 Salvatierra-*2573* (PA 2997)
Executive Assistant, Appointment Office

A.B., Indiana University, 1923. At Stanford since 1925.

†Sprague, Charles Myron (1234) 512 Governor's Ave. (PA 519M)
Assistant Director, Department of Physical Education and Hygiene, and Acting Director of Swimming

A.B., Bowdoin College, 1920. Ensign, U.S. Navy, April 1917–August 1919; Football Coach and Director of Physical Education, Ellensburg (Wash.) High School, 1922–24; University of Illinois Coaching School, Summer, 1924. At Stanford since 1924.

†Stadtherr, Edward F. (123) 1630 Clement, SF-sf (Evergreen 0764)
Clinical Instructor in Medicine (Neuropsychiatry)

M.D., St. Louis University, 1913. Assistant Surgeon, U.S.N., 1917–20, Past Assistant Surgeon, 1920–21; Franklin Hospital, since 1926. At Stanford since 1921.

Starks, Chloe Lesley (Mrs.) (234) 1115 Ramona, P-p (PA 4052W)
Associate Professor of Education (Graphic Art)

At Stanford since 1899.

†Starks, Edwin Chapin (123) 1115 Ramona, P* (PA 4052W)
Associate Professor of Zoölogy

Assistant in United States Bureau of Biological Survey, 1897–99; Curator of the Museum and Assistant Professor of Zoölogy, University of Washington, 1899–1900; Investigator, Naples Zoölogical Station, 1907, 1914. At Stanford since 1900.

STAUF, IDA (123) 311 Waverley, P-Box 292, p (PA 1481 R)
Instructor in Romanic Languages

A.B., Stanford, 1910, A.M., 1912; Docteur de l'Université de Paris, 1927. Private Instructor in French, Italian, and German, Palo Alto, 1910–18; Assistant in Instruction, Romanic Languages, Stanford, 1918–22, 1923–25; Student, University of Paris, 1922–23; Research Student, University of Paris, 1925–27. At Stanford, 1918–22, 1923–25, and since 1928.

STEARNS, MARY H. (MRS.) (1234) Roble-*1772*
Social Director (Roble Hall)

At Stanford since 1924.

†STEBBINS, HORATIO WARD (123) 327 Addison, P-p (PA 316)
Associate Professor of Mechanical Engineering

A.B., California, 1899; B.S., Massachusetts Institute of Technology, 1902. Assistant to Engineer of Tests, Southern Pacific Railroad Company, 1902–5; Engineer and Estimator, San Francisco Bridge Company, 1905–13. At Stanford since 1914.

STEINMETZ, RUTH LOLITA (1234) 1021 Ramona, P* (PA 463)
Cataloguer, Library

A.B., Stanford, 1922. Student, School of Librarianship, University of California, 1922–23. At Stanford since 1923.

†STEPHENSON, HENRY AUGUSTUS (1234) 2677 Larkin, SF-sf
Associate Clinical Professor of Obstetrics and Gynecology [(Graystone 5788)

A.B., Randolph-Macon College, 1906; M.D., Johns Hopkins Medical School, 1910. Assistant Resident Obstetrician, Johns Hopkins Hospital, 1911–12, Resident Obstetrician, 1912–14; Assistant in Obstetrics, Johns Hopkins Medical School, 1911–12, Instructor, 1912–14; First Lieutenant, M.R.C., U.S.A., April 1918 to January 1919. At Stanford since 1914.

†STEVENS, WILLIAM EMERSON (1234) 1007 Gough, SF-sf (Ordway 9765)
Associate Clinical Professor of Obstetrics and Gynecology (Urology)

M.D., California, 1899. Chief of Genito-Urinary Clinic, San Francisco Polyclinic, 1912–18, Chief of Genito-Urinary Department since May 1918, Chief of Gynecological Urology Department since 1916; Visiting Urologist, San Francisco Hospital, since 1916; Consulting Genito-Urinary Surgeon, Bethlehem Shipbuilding Corporation, Ltd., Hospital, since March 1918. At Stanford since 1919.

STILLMAN, MINNA (1234) 520 Alvarado (PA 1048)
Document Librarian

A.B., Stanford, 1903. At Stanford since 1912.

STILLSON, GRACE ELIZABETH (1234) 451 Ruthven, P-p (PA 543M)
Cataloguer, Library

A.B., Stanford, 1915. At Stanford since 1917.

STOLTENBERG, CLARA S. (123) 525 Salvatierra-*1585* (PA 199)
Associate Professor of Anatomy

A.B., Stanford, 1896, A.M., 1897. At Stanford since 1896.

[†STONE, CALVIN PERRY 656 Channing, P-1148 (PA 1166M)
Associate Professor of Psychology].

A.B., Indiana, 1915, A.M., 1916; Ph.D., Minnesota, 1921. Teaching Fellow in Education, University of Minnesota, 1916; Director of Psychological Research, Indiana State Reformatory, 1916–17; Psychological Examiner, U.S. Army, 1917–19; Teaching Fellow in Psychology, University of Minnesota, 1919–21; Instructor in Neural and Histological Anatomy, University of Minnesota, 1921–22. At Stanford since 1922.

†Stone, Clarence Robert (4) 735 Dolores (PA 3759W)
Acting Assistant Professor of Education

B.S., Missouri, 1909, A.B., 1910; A.M., Chicago, 1921. Elementary School Principal, St. Louis, 1910–23; Instructor in the Psychology and Pedagogy of Reading, Harris Teachers College, 1918–22; Lecturer, Tulane University, Summer, 1923; Lecturer, San Diego State Teachers College, Summer, 1924; Acting Instructor in Education, Stanford, Summer Quarter, 1925, Acting Assistant Professor, Summer Quarters, 1926, 1927; Lecturer in Education, University of California, Summer Session, 1928.

†Storey, Thomas Andrew (1234) 739 Santa Ynez* (PA 3015)
Professor of Hygiene and Physical Education, Medical Adviser of Men, and General Director of Encina Gymnasium

A.B., Stanford, 1896, A.M., 1900, Ph.D., 1902; M.D., Harvard, 1905. Assistant, Instructor, and Assistant Professor of Hygiene, Stanford, 1896–1906; Associate Professor and Professor of Hygiene, and Director of the Department of Hygiene, College of the City of New York, 1906–26. At Stanford, 1896–1906, and since 1926.

†Strong, Edward Kellogg, Jr. (123) 672 Mirada (PA 1649)
Professor of Psychology and of Applied Psychology (Graduate School of Business)

B.S., California, 1906, M.S., 1909; Ph.D., Columbia, 1911. Assistant, Barnard College, 1909–10; Fellow in Psychology, Columbia University, 1910–11; Research Fellow in Advertising for Ad Men's League, New York City, 1911–12; Research Fellow in Advertising for Association of National Advertisers, 1912–15; Lecturer, Extension Department, Columbia University, 1911–14, 1919; Professor of Psychology and Psychology of Education, George Peabody College for Teachers, 1914–17; Lieutenant Colonel, General Staff, and Member Committee on Classification of Personnel in Army, 1917–19; Professor and Head of Department of Vocational Education, Carnegie Institute of Technology, 1919–21, Head of Bureau of Educational Research, 1921–23; Professor, Carnegie School of Life Insurance Salesmanship, 1919–23. At Stanford since 1923.

†Stuart, Graham Henry (123) 548 Gerona-*1798* (PA 2269W)
Professor of Political Science

A.B., Western Reserve, 1908; A.M., Wisconsin, 1918, Ph.D., 1919. Student, Alliance Française, 1910, Sorbonne, 1911, Ecole Libre des Sciences Politiques, 1913–14; Assistant in Political Science, University of Wisconsin, 1917, Assistant Professor, 1921–23; Research Associate, Carnegie Institution (stationed at Lima, Peru), 1924; Acting Associate Professor, University of Chicago, Summer Quarter, 1926; Acting Professor, University of Washington, Summer and Autumn Quarters, 1927. At Stanford since 1923.

†Stuart, Henry Waldgrave (1234) 654 Cabrillo-*1063* (PA 3509J)
Professor of Philosophy

Ph.B., California, 1893; Ph.D., Chicago, 1900. Teacher, Hollister (Calif.) High School, 1893–94; Fellow in Political Economy, University of Chicago, 1894–96; Instructor (pro tem.) in Economics and Psychology, Washington University, St. Louis, 1896–97; Teacher, Central School, Oakland (Calif.), 1897–98; Principal, Woodland (Calif.) High School, 1898–99; Fellow in Philosophy, University of Chicago, 1899–1900; Instructor in Economics and History, Ripon College, 1900–1901; Instructor in Philosophy, State University of Iowa, 1901–4; Acting Professor of Philosophy, Lake Forest College, 1904–5, Assistant Professor, 1905–7; Professor of Philosophy, University of Chicago, Summer Quarters, 1907, 1909, 1912, 1916, 1920, University of Washington, Summer Session, 1928. At Stanford since 1907.

Sutliff, Helen Binninger (1234) 565 Salvatierra-*927* (PA 876)
Chief Cataloguer, Library

A.B., Kansas, 1890. Head Cataloguer, University of Kansas Library, 1891–1904; Cataloguer in Columbia University Library, Summer, 1901. At Stanford since 1904.

†Swain, Robert Eckles (1234) 634 Mirada* (PA 247)
Professor of Chemistry

A.B., Stanford, 1899; M.S., Yale, 1901, Ph.D., 1904; LL.D., College of the Pacific, 1929. Student, Universities of Strasbourg and Heidelberg, 1901–2, Yale University,

1909–10; Lecturer and Medalist, Charles Frederick Chandler Foundation, Columbia University, 1924. At Stanford since 1898.

SWEET, MARY C. (1234) 921 Scott, P-p (PA 1748W)
Assistant Registrar

A.B., Vassar, 1906; B.S., Simmons, 1909. At Stanford since 1923.

SWETT, WILBER FRANK (1234) 1339 Fourth Ave., SF-sf (Montrose 6494)
Assistant Clinical Professor of Surgery (Ophthalmology)

A.B., Stanford, 1917, M.D., 1922. Lieutenant, Field Artillery, A.E.F., 1917–19; House Officer, Stanford Hospital, 1923, Resident (Ophthalmology), 1924; Postgraduate, Vienna, 1925, Oxford, 1926; Diplomate, National Board of Ophthalmic Examiners, 1926; Visiting Ophthalmologist, Mary's Help Hospital, San Francisco, Southern Pacific Hospital, San Francisco. At Stanford since 1923.

†TAINTER, MAURICE LANE (1234) 2908 California, SF-sf (Walnut 1196)
Assistant Professor of Pharmacology

A.B., Stanford, 1921, A.M., 1924, M.D., 1925. Fellow of the National Research Council, Johns Hopkins, 1926–27. At Stanford since 1924.

†TANNER, HERBERT GILES (123) 454 Forest, P* (PA 2781J)
Acting Instructor in Chemistry

B.S., Ottawa University, 1915; A.M., Nebraska, 1916; Ph.D., Stanford, 1929. Scholar, Cornell, 1917; Research Chemist, duPont Company, 1918–19; Associate Chemist, U.S. Bureau of Soils, 1920–21; Assistant Professor of Chemistry, University of Oregon, 1922–23, Associate Professor, 1924–27; Fellow in Chemistry, Stanford, 1928.

TANNER, HILDA V. (MRS.) (1234) 1111 High, P* (PA 413)
Secretary to Dean, School of Engineering

At Stanford since 1920.

TAYLOR, ALONZO ENGLEBERT (1234) 344 Serra-*3031* (PA 2011)
Director, Food Research Institute

M.D., Pennsylvania, 1904; LL.D., Wisconsin, 1920. Student, University of Berlin, 1890–91, 1899–1900; Instructor, University of Pennsylvania, 1897–99; Professor of Pathology, University of California, 1900–1910; Professor of Pathological Chemistry, University of Pennsylvania, 1910–21. At Stanford since 1921.

†TAYLOR, CHARLES VINCENT (1234) 562 Gerona (PA 3333)
Professor of Biology

A.B., Mt. Morris College, 1911; A.M., University of California, 1915, Ph.D., 1917. Instructor in Zoölogy, University of California, 1917–18; Johnston Scholar, Johns Hopkins University, 1918–20; Assistant Professor of Zoölogy, University of California, 1920–23; Acting Assistant Professor of Zoölogy, Hopkins Marine Station, Stanford University, Summer, 1922 and 1923; Assistant Professor of Zoölogy (on exchange), University of Michigan, 1924; Research Associate, Tortugas Marine Station of the Carnegie Institution, Summers, 1924, 1926. At Stanford since 1925.

TAYLOR, ELIZABETH BRAND (MRS.) (1234) 635 Salvatierra-*524*
Secretary to Dr. Taylor, Food Research Institute [(PA 1040W)

At Stanford since 1920.

†TAYLOR, HOWARD STORY (123) 1211 College, M-*1485* (PA 3860)
Instructor in Mechanical Engineering

B.S., Michigan, 1928. Chemist, 1917; Metallurgist, Central Steel Company, 1919–20; Chief Metallurgist, Holt Manufacturing Company, 1922–24; Metallurgist and Chief Chemist, Caterpillar Tractor Company, 1924–26; Consulting Metallurgist, San Francisco, 1927; Assistant in Mechanical Engineering, Stanford, 1928. At Stanford since 1928.

†Taylor, Joseph Danner (123) 774 Santa Ynez (PA 3074W)
Associate Professor of Law

A.B., Pomona, 1912; A.B., Harvard, 1914, LL.B., 1917. With Hurlburt, Jones, and Hall, Boston, 1919–20; General Counsel, Boston Legal Aid Society, 1920–24; with Taylor and Leonard, 1924–26. At Stanford since 1926.

†Taylor, Pleasant A. (123) 2241 Bay, SF-sf (Fillmore 3925)
Clinical Instructor in Medicine

B.S., University of Oklahoma, 1912; M.D., Tulane University, 1916. Laboratory Assistant in Physiology, University of Oklahoma, 1911–12; Instructor in Anatomy, Tulane University, 1912–16; U.S. Army, 1917–19; American Red Cross, 1919–20. At Stanford since 1926.

†Templeton, Robert Lyman (1234) 666 Lasuen (PA 2827W)
Director of Track

A.B., Stanford, 1921. At Stanford since 1921.

†Terman, Frederick Emmons (123) 659 Salvatierra (PA 3851W)
Assistant Professor of Electrical Engineering

A.B., Stanford, 1920, Engineer, 1922; Sc.D., Massachusetts Institute of Technology, 1924. At Stanford since 1925.

†Terman, Lewis Madison (1234) 761 Dolores (PA 1178)
Professor of Psychology

A.B., Indiana, 1902, A.M., 1903; Ph.D., Clark University, 1905; LL.D., Indiana, 1929. Fellow in Psychology and Education, Clark University, 1903–5; Principal of High School, San Bernardino (Calif.), 1905–6; Head of Department of Child Study and Pedagogy, Los Angeles State Normal School, 1906–10; Lecturer, in Education, Indiana University, Summer Session, 1909, University of Washington, Summer Session, 1912, New York University, Summer Session, 1916, Columbia University, Summer Session, 1917; Major, Division of Psychology, Surgeon General's Office, Washington (D.C.), 1918. At Stanford since 1910.

†Thomas, Earl Charles (123) 211 Middlefield, P* (PA 2475)
Associate Professor of Civil Engineering

A.B., Stanford, 1914. Instructor in Railroad Engineering, A.E.F. University, Beaune, France, 1919. At Stanford since 1920.

†Thompson, Walter (123) 426 Lowell, P-*1798*
Associate Professor of Political Science

A.B., McPherson College, 1912; A.M., University of Kansas, 1913; Ph.D., University of Wisconsin, 1921. Fellow in Sociology, University of Kansas, 1912–13; Scholar in Political Science, University of Wisconsin, 1915–16; Instructor in Political Science and Economics, Hibbing Junior College, 1916–17, 1919–20; Graduate Student, University of Chicago, 1917, Sorbonne, 1919; Assistant in Political Science, University of Wisconsin, 1920–21, Instructor, 1921–23; Assistant Superintendent of Schools, Hibbing (Minn.), 1923–25; Professor of Government, University of Oklahoma, 1925–28. At Stanford since 1928.

†Thornhill, Claude E. (1234) 339 Manzanita, P-*3006* (PA 2378)
Associate Director, Department of Physical Education and Hygiene

At Stanford since 1922.

†Tickell, Frederick George (123) 652 Forest, P-p (PA 1768W)
Professor of Petroleum Engineering

B.S., California, 1912, E.M., 1927. Engineer at Dawson, Y.T., for the Yukon Gold Co., 1912; Assistant in Mineralogy, University of California, 1913; Engineer and Geologist, Marin Municipal Water District, 1913; Engineer, Croesus Gold Mining and Milling Co., 1914–15; Geologist and Petroleum Engineer, Southern Pacific and Associated Oil Companies, 1916–21. At Stanford since 1921.

TIMS, LEILA BUDD (MRS.) (1234) 201 Harvard Road, MP* (PA 3833J)
Executive Assistant, Food Research Institute
At Stanford since 1928.

†TOLMAN, CYRUS FISHER (234) 506 Mayfield-*830* (PA 3087W)
Professor of Economic Geology
B.S., Chicago, 1896. Fellow in Geology, University of Chicago, 1897–98; Consulting Economic Geologist, since 1898; Professor of Geology, University of Arizona, 1905–6, Professor of Geology and Mining, 1906–12; Territorial Geologist of Arizona, 1910–12. At Stanford since 1912.

†TORREY, HARRY BEAL (1234) Kingscote* (PA 3965)
Professor of Hygiene and Physical Education
B.S., California, 1895, M.S., 1898; Ph.D., Columbia, 1903; M.D., Cornell, 1927. Fellow in Zoölogy, Columbia, 1900–1901; Instructor, Assistant Professor, Associate Professor of Zoölogy, University of California, 1901–12; Temporary Assistant, Bureau of Fisheries (U.S.S. "Albatross"), 1906; Staff, San Diego Marine Biological Association, 1903–12; Professor of Biology, Reed College, 1912–20: Professor of Zoölogy, Professor of Experimental Biology, Chairman Department of Medicine, University of Oregon, 1920–25; Cornell University Medical College Clinic, 1927-28. At Stanford since 1928.

†TOWNE, EDWARD BANCROFT (123) 2629 Pierce, SF-sf (Fillmore 3270)
Associate Clinical Professor of Surgery
A.B., Harvard, 1906, M.D., 1913. Surgical House Officer, Peter Bent Brigham Hospital, Boston, 1913–14, Assistant Resident Surgeon, 1914–15; Honorary Medical Officer, Royal Army Medical Corps, France, 1915–16; Voluntary Assistant, Mayo Clinic, 1916–17; Assistant Resident Surgeon, Brigham Hospital, and Assistant in Surgery, Harvard Medical School, 1917; Lieutenant, Captain, and Major, Medical Corps, U.S.A., A.E.F., 1917–19. At Stanford since 1919.

†TOWNLEY, SIDNEY DEAN (123) 661 Cabrillo* (PA 1016)
Professor of Mathematics
B.S., Wisconsin, 1890, M.S., 1892; D.Sc., Michigan, 1897. Fellow in Astronomy, University of Wisconsin, 1890–91, Assistant in Astronomy and Mathematics, 1891–92; Hearst Fellow in Astronomy, University of California (Lick Observatory), 1892–93; Instructor in Astronomy, University of Michigan, 1893–95, 1896–98; Student, Universities of Berlin and Munich, 1895–96; Instructor in Practical Astronomy, University of California, 1898–1903, Lecturer in Astronomy, 1904–7; Astronomer in charge of International Latitude Observatory, 1903–7; Visiting Lecturer in Astronomy, Harvard University, 1925–26. At Stanford since 1907.

[†TREAT, PAYSON JACKSON 750 Dolores-*97* (PA 1128)
Professor of History]
A.B., Wesleyan, 1900; A.M., Columbia, 1903; Ph.D., Stanford, 1910. Instructor in History, Barnard School, New York City, 1900–1903; Graduate Student, Stanford University, 1903–5; Research Student in Far East, 1906–7; Instructor in Government, Harvard University, 1908–9; Lecturer in Political Science, University of California, Second Semester, 1915–16. At Stanford since 1905.

TRUE, HELEN ELLA (1234) 1505 Byron, P* (PA 1608)
Secretary to the President
A.B., Mt. Holyoke, 1905. At Stanford since 1914.

†TUSSING, FORD (123) 1500 University, P-p (PA 3531)
Instructor in Physical Education and Hygiene
A.B., Stanford, 1924. At Stanford since 1927.

VANDERVORT, LYNNETTE (MRS.) (1234) 624 Lasuen-*974* (PA 4058W)
Assistant to Medical Adviser of Women
A.B., Stanford, 1916; Graduate, Training School for Nurses, Chicago, 1899. Assistant to Director of Nurses, St. Luke's Hospital, Chicago, 1907–11; Director of Social

Service, 1916–18; Chief Nurse, U.S. Base Hospital No. 14, 1918–19; Chief Nurse, Hospital Center, Mars-sur-Allies (France), Embarkation Center, Vannes (France), 1918–19; Director of Nurses, City Hospital, Akron (Ohio), 1920. At Stanford since 1928.

†Van Patten, Nathan (1234) 526 Alvarado* (PA 3517)
Director of University Libraries

Fellow, Library Association (United Kingdom); Librarian, Wolcott Gibbs Library, College of the City of New York, 1917–20; Reference Librarian, Massachusetts Institute of Technology, 1920–21, Assistant Librarian, 1921–23; Chief Librarian, Queen's University, 1923–27; Lecturer, Library School, McGill University, 1927. At Stanford since 1928.

†Vernier, Chester Garfield (123) 679 Mirada-*1425* (PA 254)
Professor of Law

A.B., Butler College, 1903; J.D., Chicago, 1907. Graduate Scholar, University of Chicago, 1904–5; Instructor in Law, Indiana University, 1907–8; Professor of Law, University of Nebraska, 1908–10, Indiana University, 1909–11, University of Illinois, 1911–16; Lecturer in Law, University of Chicago, Summer Quarte s, 1911, 1912, University of Michigan, Summer Session, 1914. At Stanford since 1916.

†Vestal, Arthur Gibson (123) 134 Cambridge Road, Menlo Park*
Assistant Professor of Biology [(PA 2268W)

A.B., Illinois, 1911; A.M., Colorado, 1913; Ph.D., Chicago, 1915. Instructor in Biology, University of Colorado, 1911–14, and Summer Sessions, 1919, 1920; Professor of Biological Sciences, Eastern Illinois State Normal School, 1915–20. At Stanford since 1920.

†VonGeldern, Hans (1234) 2123 Bay, SF-sf (Fillmore 7951)
Assistant Clinical Professor of Obstetrics and Gynecology

A.B., University of California, 1916; M.D., Stanford, 1920. Senior Interne, Obstetrics and Gynecology, Lane Hospital, 1920–21, Resident, 1921–22; Assistant Visiting Obstetrician and Gynecologist, San Francisco Hospital, since 1921. At Stanford since 1921.

Walker, Edgar Lee (123) Stanford Union* (PA 2900)
Instructor in Physical Education and Hygiene

A.B., Stanford, 1927. Assistant Football Coach, University of Iowa, 1927–28. At Stanford since 1928.

†Warner, Glenn Scobey (123) 175 Madroño, P-p (PA 2403)
Director of Football

LL.B., Cornell University, 1894. At Stanford since 1922.

†Way, Stuart C. (1234) 768 Forty-seventh Ave., SF-sf (Bayview 1132)
Assistant Clinical Professor of Medicine (Cutaneous Diseases)

B.S., Wake Forest, 1917; M.D., University of Louisville, 1919. Interne, Louisville City Hospital, 1919–20; Rudolph Virchow Krankenhaus, Hautklinik, Berlin, 1922; Assistant Visiting Dermatologist, San Francisco Hospital, 1924; Postgraduate study, University of Berlin, Hautklinik, 1925; Assistant, Dermatologische Klinik, University of Bonn, 1925–26; Clinique pour Dermatologie et Syphiligraphie, Hôpital St. Louis, Paris, 1926; University of Edinburgh Skin Clinic and the Royal College of Physicians, Department of Pathology, Edinburgh, 1926–27; Hautklinik, Allgemeines Krankenhaus, Vienna, 1927. At Stanford, 1923–25, and since 1927.

†Weber, George Minch (123) 607 Lasuen* (PA 3811W)
Research Associate, Food Research Institute

A.B., George Washington University, 1922; M.B.A., Harvard, 1926. Special Expert, U.S. Tariff Commission, 1919–22; Statistician, Institute of Economics, Washington (D.C.), 1922–24; Associate Professor, School of Business Administration, University of Texas, 1926–27; Professor, School of Business Administration, University of Oregon, 1927–28. At Stanford since 1928.

†Webster, David Locke (13) 576 Gerona* (PA 1694)
Professor of Physics

A.B., Harvard, 1910, Ph.D., 1913. Assistant in Mathematics, Harvard University, 1909–10, Instructor, 1910–14, Assistant in Physics, 1911–15, Instructor, 1915–17; Assistant Professor of Physics, University of Michigan, 1917; First Lieutenant, Science and Research Division, A.S.S.R.C., later B.A.P., 1917–18, Captain, 1918; Assistant Professor of Physics, Massachusetts Institute of Technology, 1919–20. At Stanford since 1920.

Wedel, Olivia Amor (134) 340 Embarcadero, P-p (PA 3393J)
Cataloguer, Library

At Stanford since 1925.

Wegner, Walter William (123) Stanford Union-*1251* (PA 2900)
Assistant Professor of Civil Engineering

A.B., Stanford, 1922. At Stanford since 1924.

†Wells, James Bertrand (123) 846 Lytton, P-p (PA 1767R)
Associate Professor of Civil Engineering

A.B., Stanford, 1911. Draftsman and Surveyor, Standard Oil Company, 1911–12, Engineer, 1912–17; U.S. Army, 1917–18; Structural Engineer, Standard Oil Company, 1918–21, in charge of Structural Designing, Engineering Department, 1921–28. At Stanford since 1928.

†Werner, Carl Otto Eduard (12) 955 Clayton, SF-sf (Lockhaven 1727)
Lecturer on Tropical Medicine

M.D., Jena, 1901.

Westergaard, Waldemar (4) Stanford Union-*2551* (PA 2900)
Acting Professor of History

A.B., North Dakota, 1906; M.L., California, 1910, Ph.D., 1915. Fellow in History, Cornell University, 1911–12; Assistant in History, University of California, 1913–14; Head of History Department, Santa Barbara High School and Junior College, 1914–16; Assistant Professor of History, Pomona College, 1916–18, Associate Professor, 1918–20, Professor, 1920–25; Acting Professor of European History, University of California (Berkeley), Summer Session, 1921; Professor of History, University of California at Los Angeles, since 1925.

†Weymouth, Frank Walter (1234) 517 Salvatierra-*96*
Associate Professor of Physiology

A.B., Stanford, 1909, A.M., 1911, Ph.D., 1923. Assistant in Physiology, Johns Hopkins University, 1912–13. At Stanford since 1910.

†Whipple, Fred Lawrence (4) Stanford Union (PA 2900)
Acting Instructor in Mathematics

A.B., University of California at Los Angeles, 1927. Teaching Fellow, University of California (Berkeley), since 1927.

†Whitaker, Albert Conser (134) 544 Alvarado-*995* (PA 2924W)
Professor of Economics

A.B., Stanford, 1899; Ph.D., Columbia, 1904. Fellow in Economics, Columbia University, 1900–1901; Student, University of Berlin, 1901; Lecturer in Economics and Social Science, Columbia University, 1906–7; Lecturer in Economics, University of California, Summer Sessions, 1906, 1911, 1924; Acting Professor of Economics, University of Chicago, second half of 1911–12, and 1912–13. At Stanford since 1902.

†Whitaker, Douglas Merritt (123) University Heights, MP-*1603*
Instructor in Biology (Physiology) [(MP 798J)

A.B., Stanford, 1926, Ph.D., 1928. Research Associate, Carnegie Tortugas Laboratory, Summer, 1926; University Scholar, Stanford, 1926–27; Assistant in Instruction, Zoölogy, Stanford, 1927; Research Table, Marine Biological Laboratory, Woods Hole (Mass.), Summers, 1926, 1927; Graduate Student, Columbia, First Semester, 1927–28. At Stanford since 1928.

†Whitmore, Charles S. (123) 1023 Emerson, P* (PA 1256W)
Assistant Professor of Military Science and Tactics (Field Artillery)

Graduate, United States Military Academy, 1920. First Lieutenant, Field Artillery, U.S.A. At Stanford since 1925.

Whittern, Jessie Dunten (Mrs.) (1234) 219 Hawthorne, P-*3001*
Assistant Editor, University Press [(PA 677J)

Head Proofreader, University of Chicago Press, 1911–18, Assistant Editor, 1919–25. At Stanford since 1925.

†Whittier, Clarke Butler (123) Santa Cruz Ave., Menlo Heights-*890*
Professor of Law [(PA 1243R)

A.B., Stanford, 1893; LL.B., Harvard, 1896. Attorney at Law, Los Angeles, 1895–96; Student, Stanford University, 1896–97, Instructor in Law, 1897–99, Assistant Professor, 1899–1900, Associate Professor, 1900–1902; Professor of Law, University of Chicago, 1902–14. At Stanford, 1897–1902, and since 1915.

†Whyburn, Gordon Thomas (4) 656 Bowdoin, M*
Acting Assistant Professor of Mathematics

A.B., Texas, 1925, A.M., 1926, Ph.D., 1927. Instructor in Pure Mathematics, University of Texas, 1926–27, Adjunct Professor since 1927.

Wickes, Florence (1234) 519 Webster, SF-sf (Underhill 6152)
Reference Librarian, Lane Medical Library

At Stanford since 1918.

†Wiedmann, Milton Laurence (123) 428 Guinda, P-*2637*
Instructor in Mathematics

A.B., Stanford, 1925, Engineer, 1926. At Stanford since 1925.

†Wight, William Franklin (123) Matadero, M-Box 775, p (PA 1687R)
Lecturer in Botany

B.S., Michigan State College, 1894; A.B., Stanford, 1899, A.M., 1900. Assistant in Botany, Stanford, 1899–1900; Assistant in Systematic Botany, U.S. Department of Agriculture, 1900–1903, Assistant Botanist, 1903–12; Inspector General, de la Sección Estaciones Experimentales, Argentine Republic, 1912; Agricultural Explorer in Chile, Peru, and Bolivia, U.S. Department of Agriculture, 1913, Associate Botanist, 1913–28, Botanist, 1928.

†Wilbur, Ray Lyman (1234) Lagunita Knoll* (PA 46)
President of the University

A.B., Stanford, 1896, A.M., 1897; M.D., Cooper Medical College, 1899; LL.D., California, 1919, Arizona, 1919, Pennsylvania, 1925, New Mexico, 1928, Pittsburgh, 1929; Sc.D., Syracuse, 1924. Assistant in Physiology, Stanford University, 1894–96, Instructor, 1896–97; Lecturer and Demonstrator in Physiology, Cooper Medical College, 1899–1900; Assistant Professor, Stanford, 1900–1903; Professor of Medicine, and Dean of the Stanford School of Medicine, 1909–16. At Stanford, 1894–97, 1900–1903, and since 1909.

†Wildman, Murray Shipley (134) 668 Cabrillo* (PA 1179)
Professor of Economics

A.B., Earlham, 1893; Ph.D., Chicago, 1904. Professor of History and Economics, Central College (Mo.), 1904–5; Instructor in Economics, University of Missouri, 1905–6, Assistant Professor, 1906–8; Acting Assistant Professor, University of Chicago, Summer Quarter, 1909; Assistant Professor of Economics and Commerce, Northwestern University, 1909–11, Professor, 1911–12. At Stanford since 1912.

†Wilson, Edwin Everett (123) 741 Columbia, M-*2242* (PA 637W)
Instructor in Citizenship

B.S., Minnesota, 1923; A.M., Stanford, 1927. County Extension Agent, U.S. Department of Agriculture, 1923–26; Assistant in Economics, Stanford, Winter Quarter, 1926–27. At Stanford since 1927.

[†Wing, Charles Benjamin 345 Lincoln, P-p (PA 2463J)
Professor of Structural Engineering]

C.E., Cornell, 1886. Fellow in Civil Engineering, Cornell University, 1886–87, Instructor, 1887–90, Assistant Professor, 1890–91; Engineer, Pompton (N.J.) Powder Co., 1887, Phoenix Powder Co., Farmingdale (N.J.), 1888; Assistant Engineer, Berlin (Conn.) Iron Bridge Co., 1889–90; Professor of Bridge and Hydraulic Engineering, University of Wisconsin, 1891–92. At Stanford since 1892.

Winter, Helen Adelaide (34) 2112 Leavenworth, SF-sf
Secretary to Dean, School of Medicine [(Graystone 5359)

At Stanford since 1929.

Winterburn, John Charles (123) 217 Madroño, P-991 (PA 4095W)
Assistant Director, Department of Physical Education and Hygiene

B.S., University of Pittsburgh, 1923. Director of Athletics, Donora (Pa.) Schools, 1923–24; Instructor in Physical Education and Major Sports, San Mateo Union High School, 1924–25; Director of Football and Basketball, Santa Ana Polytechnic High School, 1925–26. At Stanford since 1926.

†Winters, Arthur Yvor (123) 607 Oregon, P-RFD 1, Box 286, p
Instructor in English [(PA 1161W)

A.B., Colorado, 1925, A.M., 1925. Instructor in Romance Languages, University of Idaho, 1925–27; Graduate Student, Stanford, 1927–28. At Stanford since 1928.

†Wolfsohn, Julian Mast (123) 1800 Gough, SF-sf (Ordway 3976)
Associate Clinical Professor of Medicine (Neurology)

A.B., University of California, 1905, M.S., 1907; M.D., Johns Hopkins University Medical School, 1911. Research Assistant, Herzstein Laboratory, University of California, 1906–7; Medical House Officer, Johns Hopkins Hospital, 1911–12; Major, M.C., U.S.A., May 1917 to September 1919. At Stanford since 1913.

†Wolter, Harry Meiggs (1234) 692 Mirada (PA 1781)
Director of Baseball

At Stanford since 1923.

†Wood, Casey Albert (12) 344 Serra
Lecturer in Zoölogy (Ornithology)

C.M., M.D., University of Bishop's College, 1877, D.C.L., 1903; C.M., M.D., McGill University, 1906, LL.D., 1921. Professor of Chemistry and Pathology, University of Bishop's College, 1878–85; Student, Berlin, Vienna, Paris, London, 1887–89; Professor of Ophthalmology, Chicago Medical School, 1890; Professor of Ophthalmology, College of Physicians and Surgeons, Chicago, 1898–1906; Professor of Ophthalmology, Northwestern University, 1906–8; now Emeritus Professor, University of Illinois College of Medicine; Colonel, M.R.C., U.S.A., 1920; Hon. Curator of Birds, Smithsonian Institution.

†Woolsey, Chester Howard (123) 2220 Sacramento, SF-sf
Clinical Instructor in Surgery (Genito-Urinary) [(Fillmore 0941)

B.S., California, 1895, M.D., 1901. Assistant to Chair of Clinical Medicine, University of California, 1902–6; State Bacteriologist, California, 1903–4; Assistant to Chair of Genito-Urinary Surgery, Cooper Medical College, 1911–12. At Stanford since 1912.

†Working, Holbrook (1234) 1739 Waverley, P* (PA 1909J)
Economist, Food Research Institute

A.B., Denver, 1915; A.M., Cornell, 1919; Ph.D., Wisconsin, 1921. Instructor in Economics, Cornell, 1916–17, 1919; Fellow in Economics, Wisconsin, 1919–20; Assistant Professor of Agricultural Economics, Minnesota, 1920–23, Associate Professor, 1923–25; Acting Professor of Economics, University of Chicago, Summer Quarter, 1928. At Stanford since 1925.

†Wright, Wallace (123) Cowper Ct., P-*1604* (PA 2520M)
Instructor in Economics

A.B., Dartmouth, 1919; A.M., Stanford, 1924. Instructor in Economics, Dartmouth, 1921–23; Food Research Fellow, Stanford, 1923–24, Assistant in Instruction, Economics, 1925–27, Acting Instructor, Summer Quarter, 1926. At Stanford since 1923.

†Wyckoff, Harry Alphonso (1234) 417 Oakland, Oakland-o
Associate Professor of Medicine [(Glencort 2859)

A.B., Stanford, 1907, M.D., 1916. Head of Department of Physical Education, Los Angeles High Schools, 1907–12; Bacteriologist, San Francisco Board of Health, Laboratories, 1917; Pathologist, Napa State Hospital, 1918. At Stanford since 1919.

Xander, Millicent Z. (1) 2340 Clay, SF-sf (West 6193)
Instructor in Nursing

[†Yerington, Henry Herbert 1550 Middlefield, P-p (PA 3460)
Associate Clinical Professor of Pediatrics]

M.D., Columbia University, 1908. Student, Stanford University, 1900–1904, Bellevue Hospital, New York, 1909–10; House Physician, Pediatric Service, Bellevue Hospital, 1909–10; Instructor in Pediatrics, Cooper Medical College, 1910–11; Visiting Pediatrician, San Francisco Hospital; Assistant, Visiting Staff, Children's Hospital, San Francisco. At Stanford since 1913.

Yost, Mary (1234) 532 Lasuen-*934* (PA 1203)
Dean of Women, and Lecturer in English

A.B., Vassar, 1904, A.M., 1912; Ph.D., Michigan, 1917. Graduate Scholar, Vassar College, 1904–5; Assistant in English, Wellesley College, 1906–7; Instructor in English, Vassar College, 1907–13; Fellow, University of Michigan, 1913–15; Assistant Professor, Vassar College, 1915–21; Reader, College Entrance Examination Board, 1912–18, Head Reader and Examiner, 1918–21. At Stanford since 1921.

Young, Stewart Woodford (123) Santa Cruz Ave., Menlo Heights*
Professor of Physical Chemistry [(PA 2349J)

B.S., Cornell, 1890. Assistant in Chemistry, Cornell University, 1890–91; Instructor in Chemistry, Swarthmore College, 1891–93. At Stanford since 1893.

Zapoleon, Louis B. (1234) Menlo Park-*148* (PA 4130W)
Economist, Food Research Institute

U.S. Department of Agriculture, 1909–16; Agricultural Economist and Chief, Division of Agricultural Products and Provisions, U.S. Tariff Commission, 1917–25; served as Expert, Ways and Means and Senate Finance Committees, 1921–22. At Stanford since 1925.

ASSISTANTS IN INSTRUCTION AND RESEARCH

Azevedo, Joseph Leo, Research Assistant, Bacteriology (1234)
345 High, P-p

A.B., Stanford, 1929.

†Bailey, Paul, Surgery (Ear, Nose, Throat) (1)
San Francisco Hospital, SF-sf

M.D., University of Oregon Medical School, 1925.

Baker, Howard Wilson, Jr., English (12) 333 Waverley, P-*1514*

A.B., Whittier, 1927; A.M., Stanford, 1928.

†Balabanis, Homer Paul, Economics (123) 1256 College, M-m

Ph.B., Chicago, 1920, A.M., 1923.

Bardwell, Kathleen (Mrs.), Research Assistant, Physiology (1234)
328 Churchill, P* (PA 767M)

Barger, Justus Wheeler, English (Public Speaking) (123)
222 Stanford Union-*2115*

B.S., Kansas State Agricultural, 1922, M.S., 1923; A.M., Stanford, 1929.

Barker, Wallace Woodward, Romanic Languages (123) 524 Middlefield, P-p (PA 2251J)

A.B., Harvard, 1905.

Barmore, Mark Alfred, Chemistry (12) 226 Stanford Union-*1262*

A.B., Whittier, 1927; A.M., Stanford, 1929.

Bering, Barry Farmer, Mathematics (123) Encina-*2161*

A.B., Stanford, 1926, A.M., 1929.

Binkley, Charles Herbert, Chemistry (12) 406 Sequoia-*1245*

A.B., Stanford, 1928.

Bowen, Dorothy, English (23) 340 Roble-*2177*

A.B., Stanford, 1927.

Bowes, Ruth Garland (Mrs.), Pediatrics (134) 2535 Laguna, SF-sf (Fillmore 1883)

A.B., Stanford, 1920, M.D., 1925.

Broquet, Julia, Romanic Languages (4) Roble (PA 3100)

A.B., St. Theresa, 1924; A.M., California, 1926.

Brown, Earl Theodore, Physics (123) 136 Partridge, MP-mp

B.S., Washington, 1918, M.S., 1924.

Bullock, Lewis Thomas, Bacteriology (4) 521 Lasuen* (PA 940)

A.B., Stanford, 1927.

Bunyan, James, Research Assistant, Russian Revolution Institute (Hoover War Library) (234) 535 Salvatierra (PA 933)

A.M., Columbia, 1919.

Burk, Lucile, Romanic Languages (123) 109 Roble-*2113*

A.B., Stanford, 1928.

†Burkhard, William George, Medicine (Tuberculosis) (1234)
907 Valencia, SF-sf (Mission 0094)

A.B., Stanford, 1923, M.D., 1927.

†Butt, Edward Merchant, Pharmacology (1) 1701 Beach, SF-sf (Fillmore 9389)

A.B., Stanford, 1924, M.D., 1929.

Calkins, Robert Deblois, Research Assistant, Food Research Institute (4)
11 Stanford Union-*2015* (PA 2900)

B.S., William and Mary, 1925; A.M., Stanford, 1929.

†Callison, Ferd Walter, Surgery (San Francisco Hospital) (1)
868 Twenty-sixth Ave., SF-sf (Skyline 8676)

M.D., College of Physicians and Surgeons, San Francisco, 1918. Interne, Stanford Service, San Francisco Hospital, 1918; Resident Physician, St. Francis Hospital, 1918–19, San Francisco Polyclinic, 1919–22; Associate Surgical Clinician, San Francisco Polyclinic, since 1922.

Carlsmith, Margaret Estelle, Pediatrics (1) 384 Post, SF-sf (Garfield 146)
A.B., Stanford, 1922, M.D., 1926.

†Chang, David Kiong, Medicine (234) 1027 Grant, SF-sf (China 1859)
A.B., California, 1922; M.D., Stanford, 1928.

Chope, Harold DeLos, Public Health and Preventive Medicine (1234)
2180 Washington, SF-sf (West 7445)
A.B., Stanford, 1926.

†Coblentz, Lambert B., Assistant Lecturer, Medicine (1234)
516 Sutter, SF-sf (Sutter 3878)
M.D., Cooper Medical College, 1904.

†Conrad, Frederick Allen, Economics (123) 465 Ruthven, P*
A.B., Goshen College, 1912; A.M., Indiana, 1913.

Cope, Danella Straup (Mrs.), Research Assistant, Hopkins Marine Station (234) Pacific Grove-pg
A.B., Utah, 1923; A.M., Stanford, 1926.

Craft, Benjamin Cole, Mining and Metallurgy (3) 209 Stanford Union-*1326*
A.B., Stanford, 1928, Engineer, 1929.

Cramer, Helen Stewart (Mrs.), Physical Education (123)
Barron Park, P-*1761* (PA 3971W)
A.B., Stanford, 1926.

Cramer, Sophia M., Education (1) 1028 Bryant, P-p (PA 853)
A.B., Stanford, 1904.

†Cuthbertson, Stuart, Romanic Languages (123) 434 Kingsley, P-p
A.B., Illinois, 1917; A.M., Colorado, 1924.

Dallas, Donald Alexander, Obstetrics and Gynecology (1234)
Lane Hospital, SF-sf (West 6193)
A.B., Stanford, 1923, M.D., 1926.

Donnay, Joseph D. H., Romanic Languages (123) 6 Stanford Union-*1532*
C.E., Liége, 1925; Ph.D., Stanford, 1929.

Donovan, Monica, Medicine (Radiology) (1234)
640 Sutter, SF-sf (Prospect 0480)
A.B., College of the Pacific, 1918; M.D., Stanford, 1921.

Doran, Madeleine Kathryn, English (12) 1245 Webster, P-*2503*
A.B., Stanford, 1927.

Dresel, Rudolph Ludwig, Surgery (Orthopedics) (12) 490 Post, SF-sf (Kearny 996)
B.S., California, 1913; M.D., Harvard, 1917.

†Duncan, Hiram B., Surgery (San Francisco Hospital) (1234)
969 Flood Bldg., SF-sf (Garfield 6767)
M.D., St. Louis University, 1912. Interne, St. Mary's Hospital, and French Hospital, 1912–13; Medical Corps, U.S.N., 1917–21; Genito-Urinary Clinic, San Francisco Polyclinic, 1914–17, Surgical Clinic, since 1921.

Dyer, Susan Louise, Education (Girl Scout Leadership) (4)
332 Forest, P-p (PA 759J)
A.B., Stanford, 1899, A.M., 1901.

Engwicht, Harry, Physics (123) 405 N. 3d, SJ* (Ballard 2007W)
A.B., Stanford, 1926.

†Fanning, John L., Medicine (Dermatology) (1234)
2295 California, SF-sf (West 6692)
M.D., College of Physicians and Surgeons, 1918. Basic course in Dermatology, Graduate School, University of Pennsylvania, 1927–28.

†Fehling, Milton Holden, Economics (1) 686 Columbia, M* (PA 2597M)
A.B., University of Michigan, 1920, A.M., 1921.

Ferris, Roxana Stinchfield (Mrs.), Research Assistant, Botany (1234)
667 Melville, P* (PA 2090)
A.B., Stanford, 1915.

Fisher, Elmer Howard, Research Assistant, Electrical Engineering (123)
313 Stanford Union-*2287*
A.B., Stanford, 1928, Engineer, 1929.

Fletcher, Charles D., Medicine (Tuberculosis) (234)
3993 Washington, SF-sf (Bayview 7951)
A.B., University of California, 1923, M.D., 1927. Interne, San Francisco Hospital, 1926–27; Assistant Resident in Neurology and Resident in Tuberculosis, Montefiore Hospital, New York, 1927–28.

Fletcher, Russell, Surgery (Ear, Nose, Throat) (1234) Stanford Hospital, SF-sf (West 6193)
A.B., California, 1922; M.D., Harvard, 1926.

§Forrester, Miriam Kathleen, English (2)
A.B., Oregon, 1927; A.M., Stanford, 1928.

Franklin, Ray, Economics (3) 786 Palo Alto, P-p
A.B., Stanford, 1928, A.M., 1929.

Fraser, Alexander Falconer, Dental Clinic (12) 507 Butler Bldg., SF-sf (Douglas 2082)
D.D.S., University of California, 1926. Instructor in Operative Dentistry, University of California, since 1926.

Furgason, Waldo H., Biology (123) 327 Waverley, P-*2493* (PA 1280M)
A.B., St. Olaf, 1924.

†Gans, Carl H., Surgery (1234) 2295 California, SF-sf (West 8732)
M.D., Western Reserve, 1925.

†Gerstle, Mark Lewis, Jr., Neurology (San Francisco Hospital) (1)
490 Post, SF-sf (Kearny 3074)
A.B., Stanford, 1924, M.D., 1925.

Gillespie, John Wynn, Botany (1) 510 Encina
B.S., Georgia, 1923; A.M., Stanford, 1926.

†Goldman, Samuel A., Assistant Lecturer in Surgery (Genito-Urinary) (234) Flood Bldg., SF-sf (Douglas 4332)
Ph.G., College of Physicians and Surgeons, California, 1903, M.D., 1907. Interne, Sacramento County Hospital, Sacramento, 1907–8; Assistant, Medical Clinic, San Francisco Polyclinic, 1913–14; Assistant, Genito-Urinary Clinic, San Francisco Polyclinic, 1914–17, Chief, since 1917; Public Lecturer for Bureau of Social Hygiene, California State Board of Health, 1917–19.

†Gorham, Curtis Byron, Surgery (Ear, Nose, and Throat) (1234)
2351 Washington, SF-sf (Fillmore 4645)
A.B., Stanford, 1924, M.D., 1928.

§Deceased, April 10, 1929.

Griesinger, Philip, Research Assistant, Food Research Institute (4) 553 Salvatierra-*2024* (PA 3318W)
B.S., State College of Washington, 1919; M.B.A., University of Washington, 1929.

Guerrero, Lina Jacob (Mrs.), Education (3) 1144 Greenwood, P-p (PA 3462W)
A.B., Stanford, 1914, A.M., 1925.

†Gurchot, Charles, Research Assistant, Pharmacology and Neurology (1234) 421 Barriolhet, San Mateo-sm (SM 4652J)
B.S., College of the City of New York, 1921; Ph.D., Cornell University, 1925.

†Gwinn, Charles Dudley, Dental Clinic (1234) 490 Post, SF-sf (Kearny 4895)
D.D.S., California, 1917. Lieutenant, Dental Corps, U.S.N.R F., 1917–19; Instructor in Extraction, Dental Department, University of California, since 1919; Visiting Dentist, French Hospital, since 1920.

Hadden, Fannie, Pediatrics (1234) 602 Jones, SF-sf
A.B., Stanford, 1917.

Hadley, Clausin D., Economics (3) 505 Princeton, M-Box 704, m (PA 1536R)
B.S., Oregon, 1928.

†Hanson, Joel H., Obstetrics and Gynecology (1234) 1086 Flood Bldg., SF-sf (Douglas 4902)
A.B., Wisconsin, 1916; M.D., Jefferson Medical College, 1918.

Harkleroad, Dudley Henry, Economics (123) 231 Stanford Union-*2817*
A.B., Stanford, 1927.

†Heath, Harrison French, Education (3) 260 S. 15th, SJ-sj (Ballard 1984R)
B.S., Washington, 1916, A.M., 1921.

†Helsley, Gordon Friedrich, Surgery (1234) 800 Monterey Blvd., SF-sf (Randolph 1232)
A.B., Stanford, 1915, M.D., 1918. Assistant Physician, California State Prison, San Quentin, 1918; Physician, State Prison at Folsom, 1918–20; Surgeon, Celite Products Co., 1920–21; House Physician and Surgeon, Greenpoint Hospital, New York City, 1921–22; Student at Vienna, 1922, at Munich, 1923.

†Henderson, James Gordon, Surgery (Genito-Urinary) (1234) 2760 Sacramento, SF-sf (Fillmore 4873)
A.B., Stanford, 1921, M.D., 1925. Resident Physician, St. Francis Hospital, San Francisco, 1925–26.

Herrington, Lovic Pierce, Psychology (1234) Sigma Nu-*1385*
A.B., Stanford, 1927, A.M., 1929.

Hess, Olga Theodore, Research Assistant, Russian Revolution Institute (Hoover War Library) (4) 513 Salvatierra* (PA 1025)
Ph.B., Brown, 1925, A.M., 1926; Ph.D., Chicago, 1929.

†Himbert, Arthur Robert, Economics (23) 241 Fulton, P-p (PA 3419W)
B.S., California, 1921, M.S., 1924.

†Hobdy, William C., Obstetrics and Gynecology (1234) 490 Post, SF-sf (Garfield 0829)
B.S., Kentucky, 1893; M.D., Columbia, 1896. House Surgeon and Physician, Patterson General Hospital, 1896–98; U.S. Public Health Service, 1898–1910; Chief Quarantine Officer, San Francisco, 1906–9; Visiting Physician, Queen's Hospital,

Honolulu, 1910–11, Visiting Surgeon, 1911–15; Member Territorial Board of Health, Honolulu, 1911–21; President, Medical Society, Hawaii, 1912–13; Visiting Surgeon, Children's Hospital, Honolulu, 1917–18.

Hoppaugh, Katherine W., Botany (2) 513 Salvatierra-*2123*
B.S., Arizona, 1924; A.M., Stanford, 1929.

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A.B., Johns Hopkins, 1921, M.D., 1925. Surgical House Officer, Johns Hopkins Hospital, 1925–26.

Humphreys, Cecil Walter, Chemistry (123) 311 Stanford Union-*1092*
A.B., College of the Pacific, 1927; Engineer, Stanford, 1928.

Hurlbut, John Bingham, Political Science (123) 567 Lincoln, P-Box 291, p (PA 1580J)
A.B., University of California at Los Angeles, 1928.

†Ingelow, George Carpenter, Economics (12) 345 Forest, P-p (PA 3637W)
A.B., Stanford, 1914, A.M., 1928.

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B.S., Nebraska, 1910, A.M., 1915; M.D., Columbia, 1914. Interne, First Surgical Division, Bellevue Hospital, 1914–16; U.S. Navy Medical Corps, 1917–19; Assistant in Otolaryngology, San Francisco Polyclinic, 1919–22; Eye, Ear, Nose, and Throat Service, South San Francisco Hospital, since 1919.

Israel, Harry Frederick, Psychology (4) 520 University, P-p
A.B., Stanford, 1927.

Jensen, Dortha Williams (Mrs.), Research Assistant, Psychology (23) 828 Cowper, P-*654*
A.B., Indiana State Normal School, 1922; A.M., Ohio State, 1925; Ph.D., Stanford, 1929.

Johnstone, William Crane, Jr., Political Science (123) 567 Lincoln, P-Box 1015, p (PA 1580J)
A.B., Denver, 1924, A.M., 1927.

†Kaufman, Bernard, Medicine (234) 2000 Van Ness, SF-sf (Graystone 8212)
M.D., Cooper Medical, 1909.

Kay, Mary Evelyn, Research Assistant, Physiology (123) 739 Bryant, P* (PA 2974J)
A.B., Tulane, 1924; A.M., Stanford, 1929.

†Kelly, E. Lowell, Research Assistant, Psychology (123) 533 Cornell, M-*2314*
B.S., Purdue, 1926; A.M., Colorado State Teachers College, 1928.

Kraemer, Mary Webster (Mrs.), Classical Literature (Latin) (4) 574 Lasuen (PA 1021W)
A.B., Stanford, 1897, A.M., 1917.

†Kulmann, Charles Albert, Orchestra (123) 1160 Byron, P-*2407* (PA 3278W)
A.B., Stanford, 1926.

†Lachele, Clarence Edward, Chemistry (123) 115 Alma, P-p
B.S., Oregon State Agricultural, 1922; A.M., Stanford, 1929.

Lapiere, Richard Tracy, Economics (123) 353 Lowell, P-*2622* (PA 943)
A.B., Stanford, 1926, A.M., 1927.

Lazarus, Lawrence Henry, Chemistry (12) 741 Addison, P-*1793*
A.B., Stanford, 1928, A.M., 1929.

Leicester, Henry Marshall, Chemistry (123) 207 Stanford Union-*1522*
A.B., Stanford, 1927, A.M., 1928.

Leonard, Eileen M., Pediatrics (Children's Clinic) (34)
1124 Fulton, SF-sf (Fillmore 1819)
A.B., California, 1917; M.D., Stanford, 1922. Resident, Pediatrics, San Francisco Hospital, 1922–23; Pediatrician, San Francisco Department of Public Health, 1923–25, San Francisco Polyclinic, since 1925.

Levy, Adolph Haffenberg, Political Science (12) 201 Stanford Union-*2531*
A.B., Stanford, 1928.

Light, Samuel E., Medicine (Dermatology) (34) 490 Post, SF-sf (Douglas 4236)
B.S., Nebraska, 1923, M.D., 1925.

Linderholm, Evelyn Bernice, Chemistry (3) 3121 Partridge, MP-Bx 37P, mp
A.B., Stanford, 1929.

Loofbourow, Robert Lincoln, Geology (4) Ventura-v
A.B., Stanford, 1929.

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1226 Yosemite, SJ-*998*
A.B., Stanford, 1928.

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A.B., Stanford, 1929.

McClatchie, Winifred Lovisa, Chemistry (23) 1126 Hamilton, P-p
A.B., Stanford, 1929.

McCully, Leona Hadley (Mrs.), Education (1) 1035 Bryant, P-p (PA 759W)
A.B., Indiana University, 1905; A.M., Stanford, 1928. Teacher of History, Evansville (Ill.) High School, 1905–7; Instructor in Psychology, State Teachers College, Chico, 1921–*22*; Counselor and Teacher of Social Studies, Palo Alto Union High School, since 1922; Acting Assistant Professor of Education, Stanford, Summer Quarters, since 1927, Assistant in Instruction, Autumn Quarters, since 1916.

McDougall, Kenneth Raymond, English (Public Speaking) (1234)
1290 University, P-p (PA 3321J)
A.B., Stanford, 1927, J.D., 1929.

McDowell, Margaret Deering, Research Assistant, Chemistry (1234)
350 Addison, P-p (PA 2362)
A.B., Stanford, 1926, A.M., 1927.

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A.B., California, 1919; M.D., Stanford, 1924.

McNemar, Quinn, Research Assistant, Psychology (1234) 221 Bryant, P-p (PA 3542W)
A.B., Juniata, 1925.

Mallory, George Henry, Biology (1234) 750 Dolores-*920*
A.B., Stanford, 1920.

Manning, Ethel Marie, Research Assistant, Political Science (1234)
440 Melville, P-p (PA 2105)
A.B., California, 1920; A.M., Southern California, 1926.

Marshall, Donald Carlyon, Neurology and Pharmacology (1) 2180 Washington, SF-sf (West 7445)
A.B., Stanford, 1925.

Mathes, Mary Elizabeth, Surgery (Surgical Laboratory) (1234) Lane Hospital, SF-sf (West 6193)
A.B., Oregon, 1920; M.D., Stanford, 1928.

Matzger, Edward, Assistant Lecturer, Medicine (1234) 3436 Clay, SF-sf (Fillmore 9413)
M.D., Jefferson Medical College, 1921. Associate in Research, Hooper Foundation, 1927; Visiting Physician, San Francisco Hospital, 1928.

†Matzke, David E., Surgery (234) 350 Post, SF-sf (Garfield 0114)
B.S., Haverford, 1921; M.D., Pennsylvania, 1925. Interne, Philadelphia General Hospital, 1925–27; Resident Surgeon, Punxsutawaney Hospital, 1927–28.

Mayer, Barbara Anne, Research Assistant, Psychology (1234) Roble-*1963* (PA 3100)
A.B., Stanford, 1927.

Metzler, William Herman, Economics (2) 627 Emerson, P-p
A.B., Stanford, 1919, A.M., 1925.

Miller, Sally, Chemistry (23) 342 Roble-*2194*
A.B., Stanford, 1929.

Moore, Chester B., Obstetrics and Gynecology (Women's Clinic) (12) 384 Post, SF-sf (Douglas 7890)
B.S., California, 1906, M.D., 1909. Interne, University of California Hospital, 1909–10, Resident Obstetrician, 1910–11; House Officer, Children's Hospital, Boston, 1911–12.

†Morrissey, Edmund J., Surgery (San Francisco Hospital) (1234) 909 Hyde, SF-sf (Graystone 0136)
A.B., St. Ignatius, 1917; M.D., California, 1922.

†Muller, Siemon William, Geology (1234) 818 Middlefield, P-*655*
A.B., Oregon, 1927; A.M., Stanford, 1929.

Murray, Janet, Research Assistant, Food Research Institute (123) Menlo Heights-*1464* (PA 3193W)
A.B., Vassar, 1926.

Nethercut, Ruth Allen, Medicine (Neuropsychiatry) (1234) 2051 Scott, SF-sf (Fillmore 3525)
A.B., Stanford, 1919, M.D., 1925. Assistant Resident, Children's Hospital, San Francisco, 1926–27.

Newkirk, Katharine Andrus, Political Science (123) 455 Forest, P-p (PA 533W)
A.B., Pomona, 1923; A.M., Stanford, 1928.

†Newman, William Wise, Medicine (1234) 3525 Jackson, SF-sf (Fillmore 8773)
A.B., Stanford, 1921, M.D., 1927.

†Nylander, Towne Joseph, Economics (123) 453 Kipling, P-p (PA 3429M)
A.B., California, 1922, A.M., 1922.

Oden, Melita H. (Mrs.), Field Assistant, Psychology (1234) 2241 Jackson, SF-sf (Walnut 6366)
A.B., Stanford, 1921.

Ogg, Richard Andrew, Jr., Chemistry (3) 369 Forest, P-p (PA 989M)
A.B., Stanford, 1929.

Olsen, Elwood Richard, Medicine (1234) 2090 Pacific, SF-sf (Walnut 0484)
A.B., California, 1918, M.D., 1922. Resident, Mt. Zion Hospital, 1922–23; Shriners' Hospital, 1923–28; Assistant Dermatologist, Mt. Zion Hospital, 1923–27.

†Ottinger, Millard R., Surgery (San Francisco Hospital) (1234)
516 Sutter, SF-sf (Garfield 32)
M.D., College of Physicians and Surgeons, San Francisco, 1918.

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2085 Sacramento, SF-sf (Ordway 7994)
A.B., Nebraska, 1923, B.S., 1924; M.D., Tulane University of Louisiana, 1926. House Officer in Medicine, San Francisco Hospital, 1927–28.

Pearson, Gerald Leondus, Physics (123) 301 Stanford Union-*627*
A.B., Willamette, 1926; A.M., Stanford, 1929.

Pérez, Elisa, Romanic Languages (4) 160 Roble (PA 3100)
A.M., Kansas, 1927.

Peterson, C. Emelia, Research Assistant, Public Health and Preventive Medicine (1234) 2480 Washington, SF-sf (Walnut 4450)
A.B., California, 1921, A.M., 1922. University Fellow in Bacteriology, University of California, 1922–23.

Plate, Agnes Groves, Biology (2) 201 Roble-*2816*
A.B., Stanford, 1928, A.M., 1929.

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M.D., Johns Hopkins, 1918. Interne and Assistant Resident Surgeon, Palmerton Hospital, Pennsylvania, 1918–20; Assistant Resident in Gynecology, Lakeside Hospital, Cleveland, 1920–21.

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Stanford Hospital, SF-sf (West 6193)
A.B., Stanford, 1921, M.D., 1926.

Preston, Ruth, Education (2) 351 Channing, P-p (PA 972R)
A.B., California, 1916. Head of English Department, Palo Alto Union High School, since 1921.

†Pyle, Lindley, Physics (12) Kingscote-*536* (PA 3541J)
A.B., University of Michigan, 1901, A.M., 1902.

Ramsperger, Barbara Burks (Mrs.), Research Assistant, Psychology (Gifted Children Follow-up) (1234) 1151 Guinda, P-p
A.B., Stanford, 1924, Ph.D., 1929.

Raney, Mary Evangeline, Research Assistant and Secretary, Bacteriology (1234) Menlo Heights-*62*
A.B., Stanford, 1928.

Reed, Robert Edward, Research Assistant, Law (1) Sigma Nu-*1098*
B.S., Idaho, 1926; J.D., Stanford, 1928.

Rees, Jenkins Bennett, Physics (4) 413 S. 8th, SJ* (Ballard 2771M)
A.B., Lombard, 1903; A.M., Stanford, 1929.

Requet, Suzanne, Romanic Languages (123) Kingscote (PA 3946)
A.B., Bordeaux, 1923; A.B., Western College (Oxford, Ohio), 1925. Diplome de professeur de français á l'étranger, Sorbonne, 1924.

Reyes, Esteban, Medicine (Dermatology) (1234) 540 Castro, SF-sf (Valencia 8262)
Ex-interne for Rosales Hospital, San Salvador, 1921–23; Ex-assistant to Chief Surgeon, Rosales Hospital, 1924; Ex-physician and Surgeon, International Railway of Central America, Division of El Salvador, 1925–26.

†Reynolds, Ralph Arthur, Medicine (Laguna Honda Home) (134) 909 Hyde, SF-sf (Graystone 3000)
A.B., California, 1921, M.D., 1925. Assistant in Pediatrics, University of California, 1925–26.

Richardson, George Channing, Research Assistant, Bacteriology (1)
A.B., Stanford, 1927.

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A.B., California, 1926.

†Sale, J. Judson, Surgery (Orthopedics) (234) 490 Post, SF-sf (Kearny 3747)
M.D., Medical College of Virginia, 1917. Medical Department, U.S.N., 1917–22.

†Salinger, Herman, Germanic Languages (123) 682 Amherst, M-*988* (PA 2589)
A.B., Princeton, 1927; A.M., Stanford, 1929.

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B.S., Wesleyan University, 1922; M.D., Yale, 1926. Interne in Surgery, Strong Memorial Hospital, Rochester (N.Y.), 1926–27, Assistant Resident Surgeon, 1927–28.

†Schilpp, Paul Arthur, Philosophy (4) 235 Stanford Union-*2756* (PA 2900)
A.M., Northwestern, 1922.

Seid, Martin J., Medicine (Chest) (234) 350 Post, SF-sf (Kearny 4456)
M.D., Cooper Medical College, 1911.

Shedd, Louise Dawes, Biology (2) 361 Roble-*681* (PA 3100)
A.B., Stanford, 1928.

Sheldon, Frances Elizabeth, Research Assistant, Law (1234) 319 Escobita, P*
A.B., Stanford, 1922, J.D., 1924.

†Shevky, Eshref, Research Assistant, Pathology (1234) Stanford Medical School, SF-sf (West 6193)
Ph.D., Stanford, 1922.

†Sigurdson, Larus Arthur, Anatomy (123) 352 Middlefield, P-p (PA 3530)
M.D., University of Manitoba, 1927; A.M., Stanford, 1929.

†Simpson, Beverly, Medicine (23) 384 Post, SF-sf (Garfield 6730)
M.D., Harvard, 1924.

Smith, George E. P., Jr., Chemistry (12) 2 Stanford Union-*521*
B.S., Arizona, 1926.

†Smith, Herbert Gordon, Surgery (Ophthalmology) (1234)
490 Post, SF-sf (Garfield 1867)
M.D.,C.M., McGill University, 1923, L.M.C.C., 1923. Montreal General Hospital, 1923–24; St. Luke's Hospital, New York City, 1925–26.

Smith, Seymour P., Research Assistant, Bacteriology (4)
521 Encina-*2471* (PA 2900)
A.B., Stanford, 1927.

Snyder, Loilor Jordan, Chemistry (23) 334 Stanford Union-*2278*
A.B., Stanford, 1927, A.M., 1929.

§Snyder, Walter Willoughby, English (1)
A.B., Arizona, 1921; A.M., California, 1924.

Spaulding, Jean Benedict, Research Assistant, Pharmacology and Neurology (4) 2576 Washington, SF-sf (West 0863)
A.B., Stanford, 1928, A.M., 1929.

Springer, John Young, Economics (123) 305 Lytton, P-p (PA 1092J)
A.B., Stanford, 1927, M.B.A., 1929.

Stark, Vaal, Education (Girl Scout Leadership) (1)
500 Melville, P-p (PA 571M)
A.B., Stanford, 1917.

Stock, Thomas Leland, Political Science (12) *327* Stanford Union-*1271*
A.B., Stanford, 1927.

Stoddard, Kenneth Berkeley, Physics (123) 315 Stanford Union*
A.B., University of California at Los Angeles, 1928.

Storey, Parnie Hamilton, Zoölogy (2) 739 Santa Ynez (PA 3015)
A.B., Stanford, 1928.

Storke, Jean Isabel, Physics (12) 513 Salvatierra-*1427* (PA 1025)
A.B., Vassar, 1927.

Suma, Masao Matsumoto, Research Assistant, Political Science (1234)
Japanese Club-*1152*
A.B., Stanford, 1927, A.M., 1928.

Thomas, S. Benson, Chemistry (23) 202 Sequoia
A.B., Stanford, 1927, Engineer, 1928.

†Thompson, Warren Osborne, Geology (123) University Park-*1175*
A.B., University of Colorado, 1922.

Thomson, Ruth Haines (Mrs.), Research Assistant, Psychology (4)
615 University, P-p (PA 2023W)
A.B., Pacific University, 1917; A.M., Washington, 1921.

†Tillotson, Rulon Squires, Surgery (Ear, Nose, and Throat) (1234)
San Francisco Hospital, SF-sf (Mission 0820)
A.B., University of Utah, 1918; M.D., University of Pennsylvania, 1921. Interne, Lakeside Hospital, Cleveland (Ohio), 1921–22; Surgeon, Nevada Consolidated Copper Co., Ely (Nev.), 1923–27; Postgraduate Student, Otolaryngology, University of Pennsylvania, 1927–28; House Officer, Otolaryngology, San Francisco Hospital, since July 1928.

§Deceased, December 28, 1928.

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A.B., California, 1921, M.D., 1925.

Varneck, Elena (Mrs.), Research Assistant, Russian Revolution Institute (Hoover War Library) (4) 322 Cambridge, MP*
Graduate, Smolny Institute, Petrograd, 1907; Special Student, Raevskie Kursy, 1910–11, University of Michigan, 1921–22; Editorial Office of the *Living Age*, Boston, 1922–27.

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B.S., California Institute of Technology, 1928.

Waitzinger, Ludwig August, Research Assistant, Biology (1234) 531 Harvard, M-*683* (PA 637R)
B.S., Jena University, 1912.

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A.B., Stanford, 1926.

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A.B., Oberlin, 1924, A.M., 1926.

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A.B., State College of Washington, 1925; J.D., Stanford, 1929.

White, Ralph K., Research Assistant, Psychology (4) 220 Toyon-*1255*
A.B., Wesleyan, 1929.

†Wiggins, Ira Loren, Botany (Dudley Herbarium) (4) 1087 Ashby, P*
A.B., Occidental College, 1922; A.M., Stanford, 1925. Instructor in Botany, Occidental, 1925–27; University Fellow in Botany, Stanford, 1927–29.

Williamson, Shirley (Mrs.), English (Public Speaking) (4) 1344 Tasso, P-p (PA 2215W)
A.B., California, 1921, A.M., 1922.

Wilson, Robert Henry, Classical Literature (1) 1557 Ralston, Burlingame-b
A.B., Stanford, 1928, A.M., 1929.

Wirt, Sheldon Kessinger, Romanic Languages (123) 108 Sequoia-*1282*
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M.D., Minnesota, 1924.

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A.B., Occidental, 1926; A.M., Stanford, 1927.

Wood, David Alvra, Research Assistant, Pharmacology (1234) 2180 Washington, SF* (West 7445)
A.B., Stanford, 1926.

Woodhouse, Edwin Deshler, Biology (2) 1133 Harker, P-p
B.S., California, 1919; A.M., Stanford, 1929.

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A.B., Tulane University, 1926; A.M., Stanford, 1928.

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1501 Stanford, M-*1768* (PA 1761J)
A.B., Oxford, 1902, A.M., 1910.

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†Barrett, Frank C., Anatomy (1234) 129 Emerson, P-p (PA 2449W)

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260 Fulton, Redwood City* (R 754J)
A.B., Stanford, 1911.

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150 Seventeenth, Pacific Grove-pg

†Borrow, Sidney W., Physics (1234) 520 Lowell, P* (PA 1739J)

†Bruce, Walter Johnson, Chemistry (1234) 415 Florence, P* (PA 342W)

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260 Churchill, P-p (PA 768R)
A.B., Hastings, 1925.

Cottrell, Annice L. (Mrs.), Office Assistant, Graduate School of Business (1234) 949 Webster, P-p (PA 1628J)

Craft, Benjamin Cole, Mining and Metallurgy (12) Kappa Sigma*
A.B., Stanford, 1928, Engineer, 1929.

Crobaugh, Merwyn, Economics (2) Stanford Univ.

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309 Sequoia-*1206*

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Pacific Grove-pg
B.S., Aberdeen, 1908.

Davidson, Eleanor, Secretary, Medical Adviser of Women (12)
820 Hamilton, P* (PA 1992M)
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Dillon, Hazel, Assistant Secretary, Education (4) Roble-*1337* (PA 3100)
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Eaton, Evelyn, Secretary, English (1234) 553 Salvatierra-*904* (PA 3318W)
A.B., Stanford, 1925.

Field, Ross Haskins, Junior Assistant, Geology (4) Ventura-v
A.B., Stanford, 1929.

Gossmann, Charles, Anatomy (1234) Alice Lane, Menlo Park-*2222*

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450 Harvard, M-*113* (PA 2078M)

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739 Santa Ynez-*1366* (PA 3015)
A.B., Stanford, 1928.

Hickman, Grace, Secretary, Mining (1) 1300 Emerson, P* (PA 939J)

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Pacific Grove-pg
A.B., Stanford, 1929.

†Ignacio, Frank, Museum (1234) 526 Lowell, P-*1322*

Johnson, Sylvia, Bacteriology (1234) 574 Addison, P-p (PA 1751)
B.S., University of Washington, 1924.

Kay, Mary Evelyn, Secretary, Physiology (123) 739 Bryant, P* (PA 2974J)
A.B., Tulane, 1924; A.M., Stanford, 1929.

King, P. Stanley, Statistical Assistant, Food Research Institute (1234)
East Palo Alto* (PA 242J)

Kirkbride, Audrey Martha, Secretary, Political Science (123)
2265 Broadway, SF-sf (West 0810)
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Kohler, Nina, Secretary, Physical Education (Roble Gym.) (1234)
528 Lincoln, P-p (PA 1962W)

Kullmann, Ethel Delia, Botany, Hopkins Marine Station (4)
Pacific Grove-pg
A.B., Wisconsin, 1928.

†Lemos, Frank B., Museum (1234) 552 Tennyson, P-*1333* (PA 2226J)

†Lemos, John T., Art Gallery (1234) 627 Seale, P-*1322* (PA 2713)

Mahoney, Rolland Florance, Camp Manager, Geology (4) Ventura-v
A.B., Stanford, 1929.

Marks, Graham Wallace, Assistant Custodian, Chemistry (1234)
235 Toyon-*1531*
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A.B., Stanford, 1926.

Milthaler, Susanne (Mrs.), Anatomy (1234) 813½ Cowper, P-*1164*

Morgan, Edith (Mrs.), Nurse, Student Health Service Office (1234)
346 Bryant Ct., P* (PA 3550W)

Newnan, Gladys, Bacteriology (1234) Mountain View-mv (MV 13F1)
A.B., Stanford, 1924.

Oldroyd, Ida Shepard (Mrs.), Curator, Geology (1234)
548 Alvarado-*1198* (PA 198)

†Oldroyd, Tom Shaw, Assistant Curator, Geology (1234)
548 Alvarado-*1198* (PA 198)

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A.B., Stanford, 1927.

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A.B., Stanford, 1928.

Reinold, Mary, Stenographer, Food Research Institute (1234)
20 Harvard, P* (PA 3833J)

Roberts, Ada Jane, Assistant Secretary, School of Education (1234)
542 Webster, P*
A.B., Stanford, 1926.

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Snoddy, Charles, Secretary and Technical Assistant, Military Science and Tactics (1234) 439 Emerson, P* (PA 636)

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Stuart, Burton, Physics (1234) Mayfield-m

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A.B., California, 1918.

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A.B., Stanford, 1928.

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Evans, Ruth, Assistant, Appointment Office (1234) 360 Bryant, P-p

Hankins, Dorothy, Cashier and Bookkeeper, Appointment Office (234) Menlo Park-Box 75, mp (PA 1599)

Jacobson, David Samuel, Assistant to Dean of Men (Board of Athletic Control) (23) 215 Encina (PA 3145W)

Jordan, Marjory Lee (Mrs.), Stenographer, Appointment Office (34) 251 Emerson, P-p (PA 1103)

Lofland, Evelyn, Secretary to Dean of Women (1234) 345 Forest, P-*2484* (PA 3695W)
A.B., Stanford, 1926.

Macabee, Katherine Jost (Mrs.), Secretary to Alumni Secretary (1234) Cedar, MP-Menlo School, mp (PA 3244)

Tracksell, Ruth, Assistant, Appointment Office (1234) 117 Roble-*557*
A.B., Stanford, 1926.

OFFICE OF THE REGISTRAR

Bolender, Louise Kelly (Mrs.), Assistant (34) 880 Forest, P-p (PA 1795J)
A.B., Stanford, 1920.

Ewell, Bernice Charlotte, Assistant (1234) Lasuen-*1007* (PA 177)

Stevens, Florence Tuttle, Assistant (1234) 6 Homer Court, P-p (PA 3271J)

Weichselfelder, Marguerite, Assistant (1234) 456 Ruthven, P-p (PA 1858W)
A.B., Stanford, 1925.

Wrenn, Charles Gilbert, Assistant (23) 261 Hawthorne, P-p (PA 1583)
A.B., Willamette, 1926; A.M., Stanford, 1929.

THE LIBRARY

Baker, Hugh Cheney, Assistant, Loan Desk (1234) 431 Waverley, P-*135*
A.B., Stanford, 1928.

Belenky, Lucas, Assistant, Loan Desk (1234) 321 Cowper, P-p (PA 931)
A.B., Stanford, 1927.

Benepe, M. Acelia (Mrs.), Assistant, Loan Desk (1234) 345 Forest, P-p
A.B., Stanford, 1928.

Boezinger, Lina, Typist, Hoover War Library (1234) 431 Channing, P-p (PA 1289)

Brunner, Ruth Wilde (Mrs.), Assistant, Law Library (1234)
1520 Byron, P-p (PA 2257J)

Buchanan, A. Russell, Assistant Reference Librarian, Hoover War Library (1234) Palo Alto-Box 431, p (PA 242J)
A.B., Stanford, 1927, A.M., 1928.

Dawson, Orcena, Assistant, Order Division (4) 535 Everett, P-p (PA 3213J)

Emerson, Ethel Eunice, Assistant, Order Division, Hoover War Library (1234) Mt. View-mv (MV 84R)
A.B., Stanford, 1917.

Forbes, Theresa, Assistant, Order Division (1234) 474 Everett, P-p

French, Evelyn F. (Mrs.), Assistant, Document Division (1234)
435 Princeton, M-*2006* (PA 2117W)

Hadley, Gertrude, Typist, Catalogue Division (1)
Redwood City-Box 156, rc (Redwood 539)

Hayes, Bernice, Assistant, Reference Division (1234) 513 Salvatierra-*2554* (PA 1025)

Junkert, Mabel A. (Mrs.), Secretary, Hoover War Library (1234)
151 Melville, P-p (PA 1669W)

Kirkpatrick, Leonard Henry, Assistant, Loan Desk (1234)
219 Ramona, P-*1081*

Krassovsky, Dimitry M., Assistant, Hoover War Library (1234)
1018 Harker, P-*662*

Landweer, Ina E., Cataloguer, Hoover War Library (1)
1931 Alameda, Santa Clara-sc

Lillie, Raymond Fell, Assistant, Loan Desk (1234)
530 Lytton, P-p (PA 3302W)

Maier, Louise, Secretary to the Director (1234) Mayfield-Box 277, m (PA 2260W)

Miles, Bonita E., Cataloguer (1234) Kingscote-*1023* (PA 2567J)
A.B., Nevada, 1924.

O'Keefe, Marcella Frances, Assistant, Order Division (1234)
Menlo Park-Box 516, mp
A.B., Stanford, 1926.

Owens, William, Loan Desk (1234) 630 Lincoln, P-p

Renne, Elsie, Typist, Catalogue Division (1234)
531 Cowper, P-p (PA 2706J)

Rensch, Ethel G. (Mrs.), Reserve Book Room (1234)
922 College, M-*1231* (PA 1474W)

Robertson, Muriel, Typist, Catalogue Division (1234) 1035 Emerson, P-p (PA 3645J)

Schoenheit, Helen Mar, Assistant, Law Library (1234) Cupertino-c (Santa Clara 162M)
A.B., Stanford, 1926.

Scibird, Ruth, Assistant, Reference Division (1234) 513 Salvatierra-*804* (PA 1025)

Shue, Violet E. (Mrs.), Assistant, Reference Division (1234)
727 Bryant, P-*2273* (PA 1514)
A.B., South Dakota, 1921.

Spaulding, Ruth I., Chief of Serial Division (1234) 528 Channing, P-p (PA 541)
A.B., Stanford, 1922.

Stockle, Louise, Assistant, Reference Division (1234)
234 Grant Road, Mountain View-mv (MV 6F13)
A.B., California, 1923.

Tinney, Eileen, Assistant, Loan Desk (123) 192 Bryant, P-p

Tum Suden, Linda, Assistant, Lane Medical Library (1234)
1900 Washington, SF-sf (West 7473)

Wedel, Marie D. (Mrs.), Reference Division (34) Stanford University-*1035*
A.B., Southern California, 1922.

OFFICE OF THE COMPTROLLER

Accounting Department

Bale, Ella C. (Mrs.), Secretary to Auditor (1234) 802 Waverley, P-p (PA 2500R)

Barker, Nettie H. (Mrs.), Clerk (1234) 633 Hamilton, P-p (PA 2305J)

Beverly, Gladys M., Cashier (123) 570 Mayfield (PA 245J)

Clarkin, John P., Bookkeeper (1234) 145 Monroe, Redwood City-rc

Dorman, Vivian Hodgen (Mrs.), Private Exchange Operator (1234)
526 Homer, P-p (PA 4009)

†Drugg, Walter C., Special Accountant (4) Stanford Blvd., MP-mp (PA 478)

Dustman, Elmer, Clerk (1234) 806 Stambaugh, Redwood City-rc

Fournie, Lillian, Endowment Clerk (1234) 252 Ramona, P-p (PA 1615R)

†Hachten, John C., Cost Accountant (23) 857 Grange Road, Burlingame-b (B 5439)

Hall, Elsie (Mrs.), Private Exchange Operator (1234) 649 Fulton, P-p (PA 234)

†Irvin, David W., Head Bookkeeper (1) 611 Alvarado (PA 515M)

Maloney, Mae, Bookkeeper (1234) 552 Palo Alto Ave., P-p (PA 661)

Moscovitz, Pearl, Cashier (1234) 150 Haight, SF-sf (Market 7249)

Pollock, Sadie, Payroll Clerk (4) Palo Alto-R.F.D., Box 3D, p (PA 3417)

Price, Marjorie S. (Mrs.), Assistant Secretary to Comptroller and Auditor (12) 565 Pope, P-p (PA 3554W)
A.B., Stanford, 1921.

†Rathman, George A., Budget Accountant (1234) 653 Stanford, M-Box 107, m

Rollow, Cephalie, Assistant Secretary to Auditor (34) 375 Little Kingsley, P-p (PA 2366W)

Schroder, Evelyn, Clerk (4) 144 Partridge, MP-mp (PA 3615)

Sebring, Betty Allison (Mrs.), Payroll Clerk (123) 585 Hanover, M-m

Thompson, Rosalind (Mrs.), Bookkeeper (1234) 860 Asbury, SJ-sj

Webber, Janet, Cashier (4) 102 Pope, P-p (PA 1056)

†Yancey, Lee L., Head Bookkeeper (1234) 173 Waverley, P-p (PA 2027M)

Mimeograph Bureau

Ramsey, Agnes Craig (Mrs.), Mimeographer (1234) 572 Lasuen-*838* (PA 1021J)

Boulware, Alice, Assistant, Mimeograph Bureau (1234) 170 Bryant, P* (PA 403J)

Tronslin, Maude S. (Mrs.), Secretary to Dr. Jordan (1234) 832 Kipling, P-p (PA 668M)

Lane and Stanford University Hospitals, San Francisco

Allan, Elsie D., Hostess (1234) 2418 Washington, SF-sf (Fillmore 2030)

Allison, Velma B., Admission Clerk (1234) 805 Leavenworth, SF-sf (Franklin 5679)

Byrne, Rose, Information Clerk (1234) 2694 Sacramento, SF-sf (West 5960)

Cunningham, Marien (Mrs.), Cashier (1234) 2390 Chestnut, SF-sf

Darnell, Lois P. (Mrs.), Telephone Operator (123) 2790 Pine, SF-sf (Fillmore 6162)

Eriksen, Einar, Bookkeeper (1234) 129 Joost, SF-sf (Delaware 6319)

Foran, Katherine, Telephone Operator (1234) 2019 Webster, SF-sf (Fillmore 7974)

Griffin, Hiram E., Night Cashier (1234) 2852 Pine, SF-sf (Fillmore 1494)

Hammond, Myrtle, Information Clerk (1234) 345 Euclid, SF-sf (Pacific 845)

Heard, Ida, Telephone Operator (1234) 1925 Oak, SF-sf (Park 3906)

Hindman, Mae, Admission Clerk (1) 1991 California, SF-sf (Graystone 1757)

Hughes, Margaret, Telephone Operator (1234) 2440 California, SF-sf (Fillmore 3422)

King, Letha F. (Mrs.), Telephone Operator (4) 525 36th St., SF-sf (Evergreen 9810)

McBride, Berenice (Mrs.), Stenographer and Clerk (4) 2290 Chestnut, SF-sf

Miller, Annie, Information Clerk (1234) 1808 Octavia, SF-sf (Graystone 7157)

Norvell, Driskill A., Bookkeeper (1234) 3325 Steiner, SF-sf

Phelan, Genevieve (Mrs.), Business Office Representative in Clinics (1234) 860 Arguello Blvd., SF-sf (Bayview 5964)

Rivera, Teresa, Stenographer and Clerk (23) 457 42d, Oakland-o (Piedmont 8565W)

Ross, Chester J., Accountant (123) 2607 Etna, Berkeley-b (Berkeley 2757)

Scott, Vera, Bookkeeper (1234) 1478 Fourteenth Ave., SF-sf (Lockhaven 3542)

Splain, Marie, Mail Clerk (1234) 1641 Washington, SF-sf (Graystone 2046)

Stafford, Margaret M. (Mrs.), Telephone Operator (12) 2385 California, SF-sf (Fillmore 3077)

Sterner, Eleanor (Mrs.), Secretary to Physician Superintendent (1234) 1903 Broderick, SF-sf (Fillmore 6360)

Sumner, W. A., Night Information Clerk (1234) 2180 Washington, SF-sf (West 7445)

Corporation Yard

†Allen, Everett A., Foreman Plumber (1234) Stanford Park-*624* (MP 1156W)

†Banham, Frank D., Mechanician (1234) 705 University, P-p (PA 1305R)

†Corwin, George W., Assistant Mechanician (1234) 827 Webster, P-p (PA 783M)

†Dugan, Robert E., Fire Marshal (1234) 561 Lomita (PA 1666, PA 2461)

†Facciolla, Ben, Cement Foreman (1234) 2091 El Camino Real, P-p (PA 1259W)

†Hachten, John C., Clerk, Yard Office (1) 857 Grange Rd., Burlingame-b (B 5439)

†Hackenberger, William H., General Storekeeper (1234) 536 Addison, P-p (PA 5191)

†McDonnell, James W., Assistant Superintendent of Buildings and Grounds (1234) 618 Fulton, P-p (PA 2363W)

Maier, Henry, Landscape Gardener (1234) 325 Occidental, Burlingame-b (B 490)

Miller, Carl F., Foreman, Garage (1234) 454 Forest, P-p

†Riechers, A., Acting Foreman Carpenter (34) 1111 Alma, P-p (PA 1216M)

†Schilling, John C., Foreman Carpenter (123) 1042 Cowper, P-p

†Schroder, Edgar, Clerk, Yard Office (34) 144 Partridge, MP-mp (PA 3615)

†Smith, George B., Foreman Painter (123) 253 Homer, P-p

†Thornton, Joseph, Labor Foreman (1234) 235 Kipling, P-p (PA 3084R)

†Waterman, Edward H., Chief Engineer, Power House (1234) 567 Lytton, P-p

†Webb, L. C., Foreman Painter (4) MP-mp

Dormitories

†Ayres, Elliott H., Manager, Men's Dormitories (1234) 826 Homer, P-*2578* (PA 1855M)

†Call, Harry William, Custodian, Sequoia Hall (123) 104 Sequoia-*81*

†Carr, William Herbert, Custodian, Stanford Union (1234) *232* Stanford Union-*1981*
A.B., Stanford, 1928.

Ferrante, Peter Joseph, Custodian, Toyon Hall (123) 243 Toyon-*43*
A.B., Stanford, 1928.

†Gage, Bertram A., Custodian, Encina Hall (1234) 1836 Webster, P-p (PA 2178W)

Hardy, Ella (Mrs.), Night Matron, Roble Hall (1234) 181 Roble-*1226*

Saunders, Gilbert Buff, Custodian, Branner Hall (1234) 302 Branner-*523*
A.B., Stanford, 1927.

Foreman Outside Properties

†Frehe, Fred W. (1234) 418 Santa Teresa-*617*

Purchasing Department

†Widman, Fred, Purchasing Agent (1234) San Francisco-sf (West 6193)

†Ayres, Elliott H., Assistant Purchasing Agent (1234) 826 Homer, P-*2578* (PA 1855M)

Salicetti, Sara (Mrs.), Secretary to Purchasing Agent (1234) 1410 Sheridan, M-m (PA 3612)

Purchasing Department, Stanford University Hospitals

†Widman, Fred, Purchasing Agent and Storekeeper (1234) San Francisco-sf (West 6193)

Easley, Annie May, Receiving Clerk (1234) 2404 Clay, SF-sf (Fillmore 8829)

Nolan, Helen, Stenographer (1234) 1474 Golden Gate, SF-sf (West 3030)

Suter, Henrietta, Assistant Storekeeper (1234) 621 Eleventh Ave., SF-sf (Pacific 7134)

Students' Co-operative Purchasing Association

†Ayres, Elliott H., Manager (1234) 826 Homer, P-*2578* (PA 1855M)

†Gage, Bertram A., Assistant Manager (1234) 1836 Webster, P-p (PA 2178W)

University Press

†Appleby, Grant, Plant Superintendent (1234) 668 Oberlin, M* (PA 3649)

†Barnes, Arthur C., Foreman, Composing Room (1234) 1029 Parkinson, P-p (PA 2650W)

Beal, Mae (Mrs.), Secretary, Publications Department (1234) 569 Addison, P-p

†Borsdamm, John, Foreman, Bindery (1234) 798 Palo Alto, P-p (PA 2436J)

†Goodspeed, Dewey, Accountant (1234) 144 Tasso, P-p (PA 1294M)
A.B., Utah, 1924.

Johnson, Ethel, Bookkeeper (1234) Palo Alto-Box 472, p

†Smith, C. Brainard, Foreman, Pressroom (1234) 1211 Fulton, P-p (PA 1910M)

Storey, Dean, Advertising Manager, Publications Department (234) 618 Homer, P-*3001*
A.B., Stanford, 1926.

OFFICE OF THE TREASURER

Pryor, Kathleen, Stenographer (1234) 25 Eighth Ave., SF-sf (Pacific 9261)

BOARD OF ATHLETIC CONTROL

Aten, Imogen, Bookkeeper, A.S.S.U. Office (1234) 1404 Floribunda, Burlingame-b (B 4576)

Brandon, Caroline, Bookkeeper (1) 559 Everett, P-p

†Denny, Wallace, Trainer, Encina Gymnasium (1234) 110 Waverley, P-p (PA 2440J)

Dodge, Isabelle, Stenographer (3) 1527 Waverley, P-p (PA 3515)

Doughty, Elizabeth Bentley (Mrs.), Stenographer (4) Los Altos-Box 161, Rt. 1, la

DuPrau, Eunice, Office Manager and Secretary to General Manager (1234) 1004 Emerson, P* (PA 3732J)

†Evans, Fred, Accountant (1234) 519 Webster, P-p (PA 2430W)

Gemur, Clara E., Stenographer (1234) Mayfield-m (PA 1588)

Gordon, Caroline (Mrs.), Bookkeeper (234) 144 Byron, P-p (PA 2705W)

†Irwin, Jacob Carney, Manager of Ticket Department (1234) 566 Everett, P-p
A.B., Stanford, 1926.

Jordan, Marjory (Mrs.), Stenographer (2) 251 Emerson, P-p (PA 1103)

Lemon, Nora, Stenographer (34) 123 University, Los Gatos-lg (LG 130R3)

†Liebendorfer, Don E., News Service (1234) 173 Madroño, P-p (PA 3251)
A.B., Stanford, 1925.

McDonald, Emanuel B., Superintendent of Athletic Buildings and Grounds (1234) Track House

†Moffitt, George W., Manager, Encina Gymnasium Store (1234) 411 College, M-m (PA 1972J)

Phillips, William L., Clerk, Encina Gymnasium Store (1234) 455 Sheridan, M-m

Phippen, Frank, Clerk, Grounds Department (34) 240 California, M-m

Sonnichsen, Jennie C., Switchboard Operator (4) Newell Road, P-p (PA 777)

Stevens, Inez, A.S.S.U. Stenographer (1234) 926 Cowper, P-p (PA 2596)

†Tucker, Orville Hugh, Jr., Engineer (1234) 1451 Cowper, P-p (PA 1258J)
A.B., Stanford, 1924, Engineer, 1927.

Zurcher, N. Jacqueline, Switchboard Operator (2) 159 Emerson, P-p (PA 524M)

DINING HALLS

Case, Charlotte B. (Mrs.), Bookkeeper (1234) 424 Seneca, P-p (PA 1524W)

Sarson, Evelyn G. (Mrs.), Stenographer (1234) 1142 Guinda, P-p (PA 638W)

Wood, Harry A., Accountant (1234) Hotel Ramona, P-p (PA 1549)

ORGANIZATION

FOUNDATION

Stanford University was established under an Act of the California Legislature, approved March 9, 1885. The Founding Grant, executed November 11, 1885, was made public at a meeting of the Board of Trustees, held in San Francisco, November 14, 1885. The cornerstone of the Inner Quadrangle was laid May 14, 1887, and the institution opened to students October 1, 1891.

NATURE, OBJECT, AND PURPOSE OF THE UNIVERSITY

"We, Leland Stanford and Jane Lathrop Stanford, husband and wife, grantors, desiring to promote the public welfare by founding, endowing, and having maintained upon our estate known as the Palo Alto Farm, and situated in the Counties of San Mateo and Santa Clara, State of California, United States of America, a university for both sexes, with the colleges, schools, seminaries of learning, mechanical institutes, museums, galleries of art, and all other things necessary and appropriate to a university of high degree, to that end, and for that purpose, do hereby grant," etc.

"And that the trust hereby created may be executed according to the wishes of the grantors and each of them, they do hereby designate the Nature, Object, and Purposes of the Institution hereby founded, to be: Its nature, that of a University, with such seminaries of learning as shall make it of the highest grade, including mechanical institutes, museums, galleries of art, laboratories, and conservatories, together with all things necessary for the study of Agriculture in all its branches, and for mechanical training, and the studies and exercises directed to the cultivation and enlargement of the mind; Its object, to qualify students for personal success and direct usefulness in life; Its purpose, to promote the public welfare by exercising an influence in behalf of humanity and civilization, teaching the blessings of liberty regulated by law, and inculcating love and reverence for the great principles of government as derived from the inalienable rights of man to life, liberty, and the pursuit of happiness."

NAME OF THE UNIVERSITY

"Since the idea of establishing an institution of this kind for the benefit of mankind came directly and largely from our son and only child, Leland, and in the belief that had he been spared to advise as to the disposition of our estate, he would have desired the devotion of a large portion thereof to this purpose, we will that for all time to come the institution hereby founded shall bear his name, and shall be known as The Leland Stanford Junior University."

MANAGEMENT AND CONTROL OF THE UNIVERSITY

The general management and control of the institution is vested in a Board of Trustees, originally numbering twenty-four, and chosen for life. By the Amending Act of May 31, 1899, the number of trustees was reduced to fifteen, with future elections for a term of ten years. The Board of Trustees fills all vacancies.

POWERS AND DUTIES OF THE TRUSTEES

"The Trustees shall have power and it shall be their duty:

"To appoint a President of the University, who shall not be one of their number, and to remove him at will.

"To fix the salaries of the President, professors, and teachers, and to fix them at such rates as will secure to the University the services of men of the very highest attainments.

"To establish and maintain at such University an educational system which will, if followed, fit the graduate for some useful pursuit, and to this end to cause the pupils, as early as may be, to declare the particular calling which in life they may desire to pursue.....

"To prohibit sectarian instruction, but to have taught in the University the immortality of the soul, the existence of an all-wise and benevolent Creator, and that obedience to His laws is the highest duty of man.

"To have taught in the University the right and advantages of association and co-operation.

"To afford equal facilities and give equal advantages in the University to both sexes.

"The Board of Trustees shall annually report all their proceedings to the person who for the time being shall fill the office of Governor of the State of California, and shall accompany such report with a full account of their financial operation for the preceding year, and with a statement of the financial affairs of the institution."

POWERS AND DUTIES OF THE PRESIDENT

"It shall be the duty of the Trustees to give to the President of the University the following powers:

"To prescribe the duties of the professors and teachers; to remove professors and teachers at will; to prescribe and enforce the course of study and the mode and manner of teaching; such other powers as will enable him to control the educational part of the University to such an extent that he may justly be held responsible for the course of study therein and for the good conduct and capacity of the professors and teachers."

AMENDMENTS TO THE FOUNDING GRANT

A clause in the Founding Grant reserved to the grantors the right to alter, amend, or modify the terms and conditions of the grant in important particulars. Under this provision amendments were made by Mrs. Stanford under date of June 1, 1897, May 31, 1899, March 28, 1902, October 3, 1902, and June 1, 1903. These amendments were concerned mainly with matters of detail, but provided also "that the number of women attending the University as students shall at no time ever exceed five hundred."

An amendment to the Constitution of the State of California, adopted November 6, 1900, "permitted, approved, and confirmed all the trusts, estates, terms, and conditions" of the Founding Grant and of all the deeds, conveyances, and other instruments made and delivered before that date, and authorized the Legislature, under certain conditions, to exempt the property of the University from taxation. Article 13 of the State Constitution, as amended November 3, 1914, exempts from taxation the buildings, grounds (not exceeding one hundred acres), equipment, securities, and income, used exclusively for educational purposes, of any educational institution of collegiate grade not conducted for profit.

THE UNIVERSITY FACULTY

"The Trustees shall constitute the President and professors the faculty of the University, and shall prescribe their powers and duties as such."

Under the Articles of Organization, adopted by the Board of Trustees March 31, 1904, the power and authority of the University Faculty is vested in the Academic Council, consisting of the President of the University, the Professors and Associate Professors, the Librarian, the Registrar, the Academic Secretary, such Assistant Professors as have been upon the roll of the faculty for three years, whether as assistant professors or instructors, and such other officers of the University or members of the teaching staff as the Academic Council may, with the assent of the Board of Trustees, determine. On October 9, 1924, the following were included in the Academic Council: The Dean of Women, Dean of Men, Chaplain, and, under certain conditions, Teaching Specialists, and members of the Library Staff and Registrar's Office. On June 18, 1926, the Director of the Summer Quarter was added, also the members of the Food Research Institute listed as Economists, Junior Economists, and Research Associates.

All general University regulations, statutes, and rules as to matters within the province of the faculty, must be initiated in and passed by the Academic Council. The Academic Council has general power and responsibility for the internal administration of the University, subject to express provisions contained in the Articles of Organization respecting the methods of exercising such powers through the President of the University, the Advisory Board, the Standing Committees, and the Department Faculties.

The Advisory Board consists of nine members of the rank of professor, one from each of the five department groups, and four chosen without reference to groups. All executive acts of general importance, such as recommendations for appointments, promotions, and dismissals, for the creation of new departments or chairs, etc., must be submitted by the President to the Advisory Board. The Advisory Board is also privileged to make such recommendations to the President, regarding policy, as it may decide by vote to be expedient, but no recommendations for appointments, promotions, or dismissals may originate with the Advisory Board.

The Executive Committee of the Academic Council consists of the President, Vice-President, Registrar, Academic Secretary, and two members from each department group elected by the Academic Council. The Executive Committee appoints the Standing Academic Committees of the Council, with the exception of the Graduate Study Committee which is elected by the Council.

The Standing Administrative Committees of the Council are appointed by the President.

The Department Faculties consist of the Professors, Associate Professors, Assistant Professors, and Instructors in the several departments, but only members of the Academic Council have the right to vote. A Department Faculty has direction of the work of instruction in the department and of the internal administration of the department, subject only to such control as is vested in the Board of Trustees, the President of the University, and the Academic Council. The Executive Head of the Department Faculty is designated annually by the President with the approval of the Advisory Board and of the Board of Trustees.

SCHOOLS

The scope of the University is indicated by the following Schools which have been organized:

School of Biology (including Anatomy, Bacteriology and Experimental Pathology, Biochemistry, Botany, Experimental Psychology, Food Research, Hopkins Marine Station, Paleontology, Physiology, and Zoölogy).

Graduate School of Business.

School of Education.

School of Engineering (including Civil, Electrical, Mechanical, Military Science and Tactics, Mining and Metallurgy).

School of Law.

School of Letters (including Classical Literature, English, Germanic Languages, Romanic Languages, Slavic).

School of Medicine.

School of Physical Sciences (including Chemistry, Geology, Mathematics, Physics).

School of Social Sciences (including Economics, History, Philosophy, Political Science, Psychology).

For the purpose of elections to the Advisory Board and Executive Committee the Schools of the University are divided into groups, as follows:

Group I. School of Letters.

Group II. School of Biology, School of Medicine, Department of Physical Education.

Group III. School of Physical Sciences.

Group IV. Graduate School of Business, School of Education, School of Law, School of Social Sciences.

Group V. School of Engineering.

The Hopkins Marine Station, located at Pacific Grove, on the Bay of Monterey, is a branch of the biological work of the University.

The Food Research Institute was organized in 1921 under grant from the Carnegie Corporation for the purpose of studying the production, distribution, and consumption of food. The Board of Directors consists of Dr. Carl Lucas Alsberg, Dr. Joseph Stancliffe Davis, and Dr. Alonzo Englebert Taylor. The Advisory Committee comprises Mr. Herbert Hoover, Dr. John C. Merriam, Mr. Julius Barnes, Mr. A. R. Howard, Dr. William M. Jardine, Mr. George C. Roeding, Dean Sarah L. Arnold, the President of the Carnegie Corporation, and the President of Stanford University.

THE UNIVERSITY YEAR

The University year begins the first of October and is continuous throughout four quarters of approximately eleven weeks each. Any three quarters constitute an academic year. The summer quarter differs from other quarters only as the courses of study in the various departments may be contracted, or expanded, or specialized to meet the needs of a particular constituency; or, as in Physiology and Zoölogy, where the summer program is transferred to the Hopkins Marine Station at Pacific Grove. The emphasis of the summer quarter is placed on advanced and graduate work.

LOCATION

The seat of the University, except for the advanced and clinical work in Medicine, is at Stanford University, in the Santa Clara Valley, thirty

miles southeast of San Francisco, on the Coast Division of the Southern Pacific Railway.* The University Trust consists of over seven thousand acres, partly level and partly rising into the foothills of the Santa Cruz Range; about fifteen hundred acres have been set aside as the campus proper. The Bay of San Francisco is about three miles east of the University grounds. Across the bay the Mount Diablo Range rises to a height of over four thousand feet, the Lick Observatory crowning Mount Hamilton, the highest of the range. The Santa Clara Valley is one of the most attractive portions of the state in fertility, in natural beauty, and in the excellence of its climate. In winter the mercury rarely falls below 30 degrees, with an average midday temperature of about 55 degrees. In summer the midday temperature ranges between 60 degrees and 80 degrees, occasionally higher and lower, the average being about 70 degrees; the nights are cool, the usual range being from 50 degrees to 58 degrees. The rainfall, normally about eighteen inches, is chiefly confined to the months from December to April, inclusive.

BUILDINGS

The architectural design of Stanford University, with the detailed plan of the inner quadrangle group, Encina Hall, and the first three engineering buildings, was the work of Mr. Charles Allerton Coolidge, of the firm of Shepley, Rutan & Coolidge, Boston, Massachusetts. The new library, men's gymnasium, pavilion, Encina Dining Hall, Toyon and Branner Halls are the work of Bakewell & Brown of San Francisco. In these newer buildings the original plan has been modified somewhat to give greater variety and interest, but the distinctive features have been preserved.

The central group of buildings, constituting two quadrangles, the one surrounding the other, is an adaptation of the mission architecture, and reproduces on an imposing scale the open arches, long colonnades, and red-tile roofing of the old Spanish missions of California. The Inner Quadrangle consists of twelve one-story buildings and the Memorial Church, connected by a continuous open arcade, and surrounding a court 586 feet long by 246 feet wide, or three and a quarter acres. The buildings are buff sandstone, somewhat varied in color, the stonework of broken ashlar, with rough rock-face, and the roofs covered with red tile.

The fourteen buildings of the Outer Quadrangle are constructed of the same material and in the same general style as the Inner Quadrangle, with open arcades on the outside. The extreme length of the Outer Quadrangle is 894 feet.

The Leland Stanford Junior Museum is situated a quarter of a mile from the quadrangles, on the west side of the avenue to Palo Alto.

The Chemistry Building, located between the quadrangles and the Museum, consists of two separate structures—the main building and the Physical Chemistry Laboratory.

South of the central quadrangles are located the workshops of the Engineering departments, experimental laboratories, etc.

Encina, Toyon, and Branner Halls, situated east of the quadrangles, and *Sequoia Hall,* west of the quadrangles, are dormitories for men. Encina will normally accommodate four hundred and fifty students; Toyon and Branner each one hundred and fifty, and Sequoia one hundred. The extension of the *Stanford Union,* completed in 1922, furnishes dormitory

* Latitude = 37°, 25′, 34″, North; longitude = 8 hours, 8 minutes, 40.8 seconds, West.

accommodations for one hundred men, and includes a public dining room. *Roble Hall,* situated southwest of the quadrangles, near Lagunita, is the dormitory for women, and will accommodate two hundred and twenty-six students.

Encina Dining Hall, consisting of one central kitchen and eight separate dining rooms, furnishes accommodations for five hundred and fifty men.

Encina Gymnasium, for men, is a brick building with a frontage of 330 feet, situated north of Encina Hall and near the athletic grounds. There are two main divisions separated by a small court. The drill hall is 120 by 65 feet, with hard maple floor. There are rooms for special exercises, shower and locker rooms in each wing, ample offices, and space for storage and laundry. An outdoor swimming pool 100 by 40 feet, and adjacent tennis courts and athletic fields are available to all men.

The Pavilion, located south of Encina Gymnasium, is a building of brick and stone construction affording ample quarters for basketball games, with a gallery seating capacity of 2,700.

The Stadium is a bowl-shaped structure built on an earth embankment and has a seating capacity of 88,000. The field includes a quarter-mile track and 220-yard straightaway.

Roble Gymnasium, for women, is a frame building, equipped with apparatus for physical education. An outdoor swimming pool, 75 by 40 feet, is located near the gymnasium. In connection with the pool there are eighteen shower rooms, seventy-two dressing rooms, a laundry and sterilizing plant to care for the swimming suits, and a room for their drying.

The Thomas Welton Stanford Art Gallery, the first building of the second quadrangle group, containing four galleries designed for the exhibition of paintings and other works of art, was a gift of Thomas Welton Stanford, brother of Senator Stanford, one of the founders of the University.

The Library Building is the central unit in the second quadrangle group. The ground floor provides a reading-room for the Hoover War Library, one for books set apart for collateral reading, a department of public documents, and administrative workrooms. On the main floor are the delivery hall, the reference and reading-rooms, a browsing-room, a periodical room, the card catalogue, and the administrative rooms; on the mezzanine and top floors, a large study-room, and smaller rooms of varying sizes for seminary and special research work. Including the Hoover War Library and the libraries of the School of Law and the School of Medicine, there are on file upward of 500,000 volumes.

The grounds immediately about the University, constituting the campus proper, have been reserved in part for experimental and ornamental purposes, in part as residence sites for members of the faculty.

The main buildings of the *School of Medicine* in San Francisco occupy four fifty-vara lots bounded by Clay, Sacramento, and Webster streets. They consist of the Clinical and Laboratory Building, including Lane Hall, and Lane Hospital—a modern building in brick and stone, with a capacity of one hundred and eighty beds—and the Stanford University Hospital, a concrete structure with a capacity of one hundred and thirty beds. The Lane Medical Library is situated on the corner of Sacramento and Webster streets, opposite the Clinical and Laboratory Building, and the Stanford School of Nursing on Clay Street, opposite the hospitals. The Library is a fireproof structure of Colusa sandstone, three and a half stories high, with steel stacks containing 65,000 volumes.

The Hopkins Marine Station is located on Cabrillo Point, Pacific Grove. The original building, the Alexander Agassiz Laboratory, is a three-story concrete structure 40 by 80 feet and provides the general laboratory and class rooms. The Jacques Loeb unit, a two-story concrete building 95 by 152 feet, provides special research laboratories, aquaria, and library. This unit, costing approximately $100,000, is a gift of the Rockefeller Foundation.

The Harris J. Ryan High-Voltage Laboratory is situated on Lasuen Street, about two miles southeast of the Quadrangle. The main laboratory is 173 feet long by 60 feet wide, with a clearance of 50 feet from the floor to the lowest roof truss. The entire south side of the building can be opened by means of huge doors 42 feet by 46 feet, in order to permit clearance of 21 feet in all directions for the high-voltage transmission lines which pass out of the building on this side and extend for a distance of approximately one and a half miles in a southerly direction. The laboratory is equipped with the largest transformer set ever constructed, with a capacity of 2,100,000 volts.

The building and equipment, costing approximately $314,000, were financed through gifts from the leading light and power companies and manufacturers of electrical equipment.

CLUBHOUSES

The Stanford Union, a clubhouse for men, was projected by Herbert C. Hoover of the class of 1895, and built by contributions from students, alumni, faculty, trustees, and friends of the University. The Union Board is made up of three faculty members, three alumni, and three undergraduates, together with the Comptroller, the Dean of Men, and the President of the Associated Students. The management and control of the clubhouse is vested in an Executive Committee composed of members of the Union Board, as follows: One faculty member, one alumnus, the Comptroller of the University, the Dean of Men, the President of the Associated Students, ex officio, and two undergraduate student members. An additional building, consisting of dining halls and dormitory accommodations for one hundred men, was completed in 1922.

The Women's Clubhouse provides a social center for the women of the University, with meeting rooms for various University organizations.

The two Union buildings and the Women's Clubhouse are connected by means of cloistered arcades surrounding a court half an acre in extent, with a fountain as the central feature, and diversified by trees, grass, and a variety of flowering shrubs and plants. The fountain was the gift of the Class of 1922.

ADMISSION TO THE UNIVERSITY

GENERAL REQUIREMENTS

Admission to the University may be granted with Graduate, Upper, or Lower Division standing. The number admitted is limited by the facilities that are available. Applicants to be accepted as candidates for admission must present satisfactory recommendations as to personal character, must offer the approved credentials required for the division concerned, and, for the Upper and Lower Divisions, must pass the college aptitude test. The method of selecting candidates is explained below. Application and other necessary blanks will be furnished by the Registrar on request, and the use of these official blanks is required. In applying for such blanks address: The Registrar, Stanford University, California.

ADMISSION OF MEN

Limitations

Graduate Division.—At present the total number of men admitted to the Graduate Division is not limited except for special restrictions in force in the School of Medicine, in the Graduate School of Business, and at the Hopkins Marine Station. In these groups applicants must first satisfy the general admission regulations, and then meet special requirements which are ordinarily on a competitive basis.

Upper Division.—The total number of men admitted to the Upper Division is not fixed but is limited to the facilities that can be provided. The exact number which can be accommodated will vary from year to year, as a result of changes within the University, and cannot be stated definitely in advance. It should be noted that the number of students who may enroll in Medicine is limited, and that fulfillment of pre-medical requirements does not guarantee admission to the School of Medicine. Admission to the Upper Division does not assure enrollment at the Hopkins Marine Station.

Lower Division.—The total number of men admitted to the Lower Division is limited to 350 for the autumn quarter and 50 for the winter quarter. (No new students are admitted to the Lower Division for the spring quarter.) At present an unlimited number may be admitted for the summer quarter *only* with the understanding that not more than 50 of such matriculants will be promised enrollment for succeeding quarters. The selection of these 50 students may be deferred until the end of the summer quarter, in order that scholarship records made during the quarter may be considered. Summer matriculants not thus selected may make application for succeeding quarters and will be considered on the same basis as other candidates.

In addition to the foregoing, 50 foreign or special students may be admitted during each academic year.

Basis of Selection

In the Graduate Division, in groups where admission is limited, selection of applicants is made only on the basis of superior preparation and fitness for the work to be undertaken.

In the Upper and Lower Divisions, selection is made on the basis of superior fitness, taking into account scholarship, personal qualifications, and score on the college aptitude test.

In the Lower Division preference is given to approved candidates who pass the examinations of the College Entrance Examination Board (old plan or new plan) with an average grade of 75 or above.

The sons of graduates of the University, and of members of the faculty will be given priority in admission to the Upper and Lower Divisions until January, 1934.

Foreign and Special Students

Candidates from foreign countries who present credentials equivalent to the requirements for admission to the University, and whose command of written and spoken English shall be deemed adequate for purposes of college study, may be admitted.

Men of considerable maturity, twenty-one years or older, who do not fulfill the scholarship requirements for first-year undergraduate standing, but whose incomplete preparation has been supplemented by practical training and experience of distinct educative value, may also be considered for admission as special students not candidates for a degree.

ADMISSION OF WOMEN

Limitations

The total number of women attending the University at any one time is limited to five hundred by the terms of the Founding Grant of the University. In addition, there are special restrictions in force in the School of Medicine, in the Graduate School of Business, and at the Hopkins Marine Station.

Basis of Selection

In the Graduate Division, the selection of candidates is made on the basis of high scholastic attainment, personal qualifications, and special fitness for the work to be undertaken.

In the Upper and Lower Divisions selection is made on the basis of superior fitness, taking into account scholarship, personal qualifications, and score on the college aptitude test.

In the Lower Division, preference is given to approved candidates who pass the examinations of the College Entrance Examination Board (old plan or new plan) with an average grade of 75 or above.

The daughters of graduates of the University and of members of the faculty will be given priority in admission to the Upper and Lower Divisions until January, 1934, provided their qualifications place them among the first one hundred and fifty candidates, chosen on the basis of superior fitness, in any list where one hundred are to be selected (proportional numbers for larger or smaller lists).

A certain number of places are assigned each quarter to Upper and Lower Division candidates who made application under the regulations in force prior to February 21, 1921. Candidates admitted on this priority list for a particular quarter, who do not matriculate for that quarter, automatically lose their standing on the list, and will thereafter be considered only on the basis of superior fitness in competition with the other applicants.

Assignment of Places

Under the 500-limit, the number of places open to new women students in October is approximately 140. Of these, 35 are provisionally assigned to approved candidates for graduate standing; 105 to approved candidates for undergraduate standing. (At present, applicants with advanced standing insufficient to meet Upper Division requirements will not ordinarily be selected for admission.) Approximately 35 places will be assigned to new undergraduate women registered on the priority list, until such applications are exhausted. Proportional assignments will be made for the winter, spring, and summer quarters.

Application and Registration

Applications for admission (on blanks to be furnished by the Registrar) and credentials must be filed before the beginning of the quarter, as follows: May 1 for the autumn quarter, December 1 for the winter quarter, March 1 for the spring quarter, and June 1 for the summer quarter. If the numerical limit for the summer quarter is not reached on June 1, applications will be received after that date and until the list is complete.

Women who have matriculated in the University at the beginning of any autumn, winter, or spring quarter will be allowed to continue without further application, so long as scholarship and conduct are satisfactory, provided they present themselves for registration at the beginning of each quarter on the regularly appointed day. Special restrictions, stated below, apply to registration for the summer quarter, and to summer matriculants desiring to re-register for succeeding quarters. Places will not be held for women students after the regular registration day, except by permission of the Committee on Registration granted in advance.

Summer Quarter Regulations

The regular lists for the summer quarter will be made up immediately after June 1. Matriculation for the summer quarter, however, does not insure registration for any succeeding quarter. Summer matriculants will be considered in the same category as other applicants, and will receive only the advantage which inheres in application before February 21, 1921, or in superior credentials. There is now no advantage in applying earlier than is necessary to fulfill preliminaries and furnish credentials before the date fixed for selection of candidates.

COLLEGE APTITUDE TEST

A college aptitude test is required of all candidates for admission to the Upper and Lower Divisions.

When credentials are otherwise satisfactory, candidates who have failed to take the college aptitude test given by the University, or a similar acceptable examination, because of remoteness from examination centers or for other reasons satisfactory to the Committee on Admission and Advanced Standing, may be provisionally selected for admission. Such candidates may be denied admission, at the discretion of the Committee, if a score below 50 is obtained in the college aptitude test to be taken at Stanford University just before the beginning of the quarter for which admission is desired.

In February and March, the test is given in numerous centers in California, and outside the state wherever satisfactory arrangements for con-

ducting the test can be made. The test is also given at the University a few days prior to the October, January, April, and June matriculation dates.

Following is the schedule of examinations given during the year 1929. A fee of *five dollars* is charged, due at the time of the examination, to cover cost of examination, scoring, and organization of results for use in the educational guidance of students.

CALIFORNIA

Bakersfield	Kern County Union High School Library	Friday	February 22,	8:30 A.M.
Chico	High School	Friday	March 1,	8:30 A.M.
El Centro	Central High School and Junior College	Saturday	March 2,	9:00 A.M.
Eureka	High School	Saturday	March 9,	9:00 A.M.
Fresno	State College	Tuesday	February 19,	8:30 A.M.
Hollister	San Benito County Junior College	Friday	March 15,	8:30 A.M.
Hollywood	High School	Monday	February 25,	1:15 P.M.
Long Beach	Woodrow Wilson High School and Junior College	Thursday	March 7,	8:30 A.M.
Los Angeles	Room 159, Polytechnic High School	Saturday	February 23,	8:30 A.M.
Marysville	Yuba County Junior College	Friday	February 15,	8:30 A.M.
Modesto	Room 5, Junior College	Monday	February 18,	8:30 A.M.
Monterey	Union High School	Saturday	March 16,	8:30 A.M.
Napa	Union High School	Wednesday	March 6,	8:30 A.M.
Oakland	Room 23, Central High School	Saturday	March 16,	9:00 A.M.
Pasadena	Room 200, Junior College	Monday	March 11,	8:30 A.M.
Pomona	High School	Tuesday	February 26,	8:30 A.M.
Red Bluff	Union High School	Thursday	February 28,	8:30 A.M.
Riverside	Room 107, Junior College	Friday	March 1,	8:30 A.M.
Sacramento	Junior College	Thursday	February 14,	8:30 A.M.
San Diego	Senior High School	Monday	March 4,	8:30 A.M.
San Francisco	Lowell High School	Saturday	March 2,	9:00 A.M.
San Jose	High School	Saturday	February 23,	8:30 A.M.
San Luis Obispo	High School	Thursday	March 14,	8:30 A.M.
Santa Ana	High School	Tuesday	March 5,	8:30 A.M.
Santa Barbara	High School	Wednesday	March 13,	8:30 A.M.
Santa Cruz	High School	Monday	March 18,	8:30 A.M.
Santa Monica	High School	Saturday	March 9,	8:30 A.M.
Santa Rosa	Junior College	Thursday	March 7,	8:30 A.M.
Stockton	High School	Saturday	February 16,	8:30 A.M.
Taft	Union High School and Junior College	Thursday	February 21,	8:30 A.M.
Ukiah	Grammar School	Friday	March 8,	8:30 A.M.
Ventura	Union High School	Tuesday	March 12,	8:30 A.M.
Visalia	Union High School	Wednesday	February 20,	8:30 A.M.

OUTSIDE OF CALIFORNIA

Arizona				
Tucson	High School	Saturday	March 2,	8:30 A.M.
Oregon				
Eugene	Room 301, Condon Hall, University of Oregon	Saturday	February 23,	8:30 A.M.
Portland	Room 202, Lincoln High School	Saturday	March 2,	8:30 A.M.
Utah				
Salt Lake City	Westminster College, Converse Hall	Saturday	February 23,	8:30 A.M.

Washington

Seattle	Room 102, Garfield High School	Saturday	March	2, 8:30 A.M.
Spokane	Lewis and Clark High School	Saturday	March	2, 8:30 A.M.
Walla Walla	Whitman College, Whitman Memorial Building, Office of Professor Bratton	Saturday	February	23, 8:30 A.M.

ADMISSION TO THE GRADUATE DIVISION

The requirements for graduate standing are fulfilled by graduates of colleges and universities of recognized standing whose credentials evidence ability and promise, and who expect to become candidates for advanced degrees, or for teaching or administrative recommendations, or who purpose to pursue regular advanced, professional, or research courses.

Admission to the University with graduate standing does not necessarily imply immediate admission to candidacy for an advanced degree. For details concerning the requirements for advanced degrees consult pages 153–158.

Special restrictions are in force in the School of Medicine, in the Graduate School of Business, and at the Hopkins Marine Station. In these groups applicants must first satisfy the general admission regulations, and then meet special requirements which are ordinarily on a competitive basis.

Application for admission must be made on the blank furnished by the University, and the candidate must designate on this blank the School in which he desires to choose his major subject. All credentials must be filed with the Committee on Admission and Advanced Standing at the Registrar's Office on or before the following dates:

Women candidates.—May 1 for the autumn quarter, December 1 for the winter quarter, March 1 for the spring quarter, and June 1 for the summer quarter.* Selection will be made after these dates, but actual matriculation in the University will be permitted only when all requirements have been fulfilled prior to the first day of the quarter for which the selection has been made.

Men candidates should file application and credentials early enough to receive assurance of admission before Registration Day, thus avoiding needless expense and disappointment.

(The special application dates for students desiring to register in Medicine will be found in the *Announcement of the School of Medicine.*)

The credentials required are: (1) Personal application for admission with graduate standing, including application fee of five dollars; (2) official transcript of all college work completed including certificate of degrees received; (3) statements of personal qualifications on blanks furnished by the University.

ADMISSION TO THE UPPER DIVISION

Candidates for admission to the Upper Division must have satisfactorily completed at least 87 quarter units (two years) of collegiate work at an institution of recognized standing. Graduates of California Junior Colleges, or other approved junior colleges, may be considered eligible for this group.

* After June 1 applications for the summer quarter may still be received, and may be granted if the numerical limitations have not been reached.

(Satisfactory completion of work means that the average grade of the entire record, and of the last quarter [or semester], is at least equivalent to an average grade of C on a grading scale in which A, B, C, and D are passing grades.)

Application for admission must be made on the blank furnished by the University, and the candidate must designate on this blank the School in which he desires to choose his major subject. All credentials must be filed with the Committee on Admission and Advanced Standing at the Registrar's Office on or before the following dates:

Women candidates.—May 1 for the autumn quarter, December 1 for the winter quarter, March 1 for the spring quarter, and June 1 for the summer quarter.*

Men candidates.—September 10 for the autumn quarter, December 10 for the winter quarter, March 10 for the spring quarter, and June 10 for the summer quarter. After June 10 applications for the summer quarter may still be received, and may be granted if facilities are available.

Selection will be made after these dates, but actual matriculation in the University will be permitted only when all requirements have been fulfilled prior to the first day of the quarter for which the selection has been made.

(The special application dates for students desiring to register in Medicine will be found in the *Announcement of the School of Medicine.*)

The credentials required are: (1) Personal application for admission with Upper Division standing, including application fee of five dollars; (2) official transcript of all college work completed, including statement of honorable dismissal from the institution last attended; (3) statements of personal qualifications, on blanks furnished by the University; (4) record of any college aptitude or similar test other than that given by Stanford University.

ADMISSION TO THE LOWER DIVISION

With Advanced Standing

Applications for admission to the Lower Division with advanced standing will be received from candidates who, in addition to the completion of the requirements for first-year undergraduate standing, have satisfactorily completed collegiate work at an institution of recognized standing, the amount being less than that required for the Upper Division. (Satisfactory completion of work means that the average grade of the entire record, and of the last quarter [or semester], is at least equivalent to an average grade of C on a grading scale in which A, B, C, and D are passing grades.)

Application for admission must be made on the blank furnished by the University, and all credentials must be filed with the Committee on Admission and Advanced Standing at the Registrar's Office on or before the following dates: May 1 for the autumn quarter, December 1 for the winter quarter, and June 1 for the summer quarter.* (No new students are admitted to the Lower Division for the spring quarter.)

The credentials required are: (1) Personal application for admission to the Lower Division with advanced standing, including application fee of five dollars; (2) complete high-school record (except for men candi-

* After June 1 applications for the summer quarter may still be received, and may be granted if the numerical limitations have not been reached.

dates who have completed a full year or more of collegiate work with satisfactory grades); (3) statements of personal qualifications; (4) official transcript of all college work completed, including a statement of honorable dismissal from institution last attended (regular transcript form of the institution to be used); (5) record of any college aptitude or similar test other than that given by Stanford University.

With First-Year Undergraduate Standing

Candidates for admission to the Lower Division with first-year undergraduate standing may fulfill the scholarship requirements either (I) by completion of a regular four-year high-school course, or its equivalent; (II) by passing the examinations of the College Entrance Examination Board; or (III) by an equivalent combination of the two.

The only prescribed subject is English (minimum, 2 units); but applicants will find it to their advantage to anticipate, in the high school, certain Lower Division requirements of the University and to offer the following as part of the 15 units required:

Four units in English;

Three units in one foreign language (or *two units* in each of two foreign languages);

One unit in either Biology, Botany, Physiology, Zoölogy, or General Science;

One unit in either Physics or Chemistry;

One unit in American History (or in American History and Civics).

In anticipation of an engineering course, *one unit* in plane geometry, *two units* in algebra, *one-half* unit in trigonometry, *one unit* in mechanical drawing, and the foreign language and biological science requirements listed above.

The maximum entrance credit which will be accepted in typewriting is *one unit;* in physical education or military training (or both combined), *one unit;* in music, *three units* (only one of which may be in vocal or instrumental technique or both). No unit values are attached to penmanship and spelling.

Scholarship Requirements

I. Without examination.—The scholarship requirements for first-year undergraduate standing are fulfilled *without examination* (1) by duly recommended graduates of approved four-year preparatory schools who present 15 units of recommending (certificate) grade (including at least 2 units in English); (2) by duly recommended graduates of approved three-year senior high schools who present 12 units of recommending grade completed in the senior high school, and 3 units of recommending grade completed in the last year of a junior high school. At least 2 units of English must be included. A total amount of 3 units may be granted for the work covered in the last year of a junior high school upon the condition that three regular subjects are carried for the entire school year with an average grade of B or 2; (3) by duly recommended graduates of approved preparatory schools presenting credentials covering the completion of 15 units of which at least 12 are of recommending grade (*a*) provided that the average of the total high-school record and the average of the work of the last two years is not less than B, on the basis that A, B, and C are the passing grades, or (*b*) provided the score obtained in the college aptitude test does not fall below the Stanford median.

Where the school does not distinguish between a passing and a recommending (certificate) standard, a subject to be accepted as of recommending grade must be at least 5 per cent higher than the lowest passing grade. The first part of a continued subject, even if below the recommending standard, may be credited provided the last part is of recommending grade and the average of the two parts is of recommending grade. Subjects below the recommending grade at the time of graduation may be brought to the recommending standard and accepted as such, provided the subject is repeated or reviewed in a regular school session or tested by examination through the College Entrance Examination Board.

II. On examination.—The scholarship requirements for first-year undergraduate standing are fulfilled *on examination* by duly recommended candidates whether or not graduates of approved preparatory schools, who pass the examinations of the College Entrance Examination Board (1) in subjects (including English) aggregating 15 units or (2) the comprehensive examinations in four subjects, under the so-called new plan. This latter plan requires also the submission of a high-school record covering 15 entrance units.

III. Examinations and recommended units combined.—Partial fulfillment of scholarship requirements without examination may be supplemented by examination, through the College Entrance Examination Board, in the subjects necessary to make up the required 15 units.

APPLICATION AND CREDENTIALS

Application for admission must be made on the blank furnished by the University, and all credentials must be filed with the Committee on Admission and Advanced Standing at the Registrar's Office on or before the following dates: May 1 for the autumn quarter, December 1 for the winter quarter, and June 1 for the summer quarter.* (No new students are admitted to the Lower Division for the spring quarter.)

The credentials required are: (1) Personal application for admission to the Lower Division with first-year undergraduate standing, including application fee of five dollars; (2) complete high-school record; (3) statements of personal qualifications; (4) record of any college aptitude or similar test other than that given by Stanford University; (5) official report of any examinations taken through the College Entrance Examination Board.

At the time of selection of candidates for the autumn quarter, made during May, work in progress will be considered in fulfillment of requirements, and admission will be granted subject to the satisfactory completion of all such work prior to the time of matriculation.

ENTRANCE UNITS

An entrance unit represents a year's study in any subject in a secondary school, constituting approximately one quarter of a full year's work. In assigning credit values two laboratory, drawing, or practice periods, not requiring additional study or preparation, are regarded as the equivalent of one recitation period. The length of the school year is assumed to be from thirty-six to forty weeks.

* After June 1 applications for the summer quarter may still be received, and may be granted if the numerical limitations have not been reached.

APPROVED PREPARATORY SCHOOLS

Approved Preparatory Schools are schools maintaining full four-years' courses of high-school work and accredited (1) by the New England College Entrance Certificate Board, by The North Central Association of Colleges and Secondary Schools, by the Association of Colleges and Secondary Schools of the Southern States, by colleges and universities of recognized standing, or (2) upon inspection undertaken or authorized by the University.

The University records of first-year students will be considered as additional evidence of the standing of preparatory schools and of their good faith and success in meeting the requirements of the University, and such evidence will be made use of in determining as to the continuance of accrediting relations.

ENTRANCE EXAMINATIONS

In June, beginning the third Monday of the month, entrance examinations conducted by the College Entrance Examination Board are held simultaneously in all parts of the United States (in California, at Stanford, Berkeley, Los Angeles, and other places), and in various foreign countries. These examinations may be taken either under the four-subject plan (new plan), or toward the completion of the fifteen units ordinarily required of those entering on examination (old plan), or to supplement deficient credentials from approved schools.

In September, beginning the third Monday of the month, comprehensive examinations only are held at the University (see page 117). (The September question papers are prepared by the College Entrance Examination Board, but the answer books are read and graded by the University.) The examination fee in September is $5, and must be paid in advance. Applications, with satisfactory credentials, must be presented to the Registrar, Stanford University, California, not later than the second Monday of the month.

The application for examination in June should be addressed to the College Entrance Examination Board, 431 West 117th Street, New York, N.Y. It should be made upon a blank form to be obtained from the Secretary of the Board upon request.

Applications for examination in June 1929 must be received by the Secretary of the Board on or before the dates specified below:

For candidates who wish to be examined in the United States at points east of the Mississippi River or on the Mississippi... May 27
For candidates who wish to be examined in the United States at points west of the Mississippi River or in Canada..... May 20
For candidates who wish to be examined in centers outside of the United States, Canada, or Asia..... May 6
For candidates who wish to be examined in Asia..... April 22

Every application for examination must be accompanied by the examination fee, which is $10 for all candidates. This fee should be remitted by postal order, express order, or draft on New York, payable to the College Entrance Examination Board.

When the candidate has failed to obtain the required blank form of application for examination, the usual examination fee will be accepted if the fee arrives not later than the specified date accompanied by a memorandum containing the name and address of the candidate, the exact examination center selected, and a list of all the subjects in which he expects to take the Board examinations.

An application for examination received later than the date specified above will be accepted when it is possible to arrange for the examination of the candidate concerned, but only upon payment of an additional fee of five dollars.

The designation of the center to which the candidate will go for examination is regarded as an indispensable part of the application for examination. A list of the places at which examinations will be held in June 1929 will be published about March 1. Requests that the examinations be held at particular points should be transmitted to the Secretary of the College Entrance Examination Board not later than February 1.

Candidates should report for a morning examination at 8:45 and for an afternoon examination at 1:45, Standard or Daylight Saving Time, according to the usage of the local public schools. Under no circumstances will a candidate be admitted to the Scholastic Aptitude Test after 9 A.M.

In these examinations the University has designated 60 as the lowest passing grade.

The examination questions set by the Board are published in yearly volumes by Ginn & Co., Boston.

Detailed definitions of the requirements in all examination subjects are given in a circular of information published annually about December 1 by the College Entrance Examination Board. Upon request a single copy of this document will be sent to any teacher without charge. In general a charge of twenty-five cents, which may be remitted in postage, will be made. (Address Secretary, College Entrance Examination Board, 431 West 117th Street, New York, N.Y.)

The Comprehensive Examinations

Applicants who present evidence of satisfactory preparatory work covering not less than fifteen entrance units may fulfill scholarship requirements by passing the comprehensive (new plan) examination in four subjects, determined as follows:

1. English (three units);
2. A foreign language, selected by the candidate (two, three, or four units);
3. Either Mathematics,* or Chemistry, or Physics, selected by the candidate (one, three, or more units);
4. A fourth subject, selected by the candidate, from the subjects in which examinations are held.

These four examinations must be taken at one time. At least two examinations must cover more than two entrance units each. In each subject selected the examination must cover all the units counted by the candidate toward the required fifteen units of preparatory work.

Comprehensive examinations are offered in the following subjects only: Biology (one unit); Botany (one unit); Chemistry (one unit); English (three units); French (two, three, or four units); German (two, three, or four units); Greek (two or three units); History (Ancient, European, English, American History with or without Civil Government—one or two divisions, one unit in each); Italian (two, three, or four units); Latin (two, three, or four units); Mathematics (three or more units); Physics (one unit); Spanish (two, three, or four units); Zoölogy (one unit). If taken

* For the comprehensive examination in Mathematics there may be substituted either one of the regular examinations in Algebra or Plane Geometry.

as an "old plan" examination, Mathematics may cover any one or more of the following divisions: elementary algebra, plane geometry, solid geometry, trigonometry, advanced algebra.

The examination schedule for September 1929 is as follows:

Monday, September 16—English, 9 A.M.; French, 2 P.M.

Tuesday, September 17—Latin, 9 A.M.; History, 2 P.M.

Wednesday, September 18—Elementary Mathematics, 9 A.M.; German, Italian, Spanish, 2 P.M.

Thursday, September 19—Chemistry, Physics, 9 A.M.; Greek, Advanced Mathematics, 2 P.M.

Friday, September 20—Scholastic Aptitude Test, 9 A.M.; Biology, Botany, Zoölogy, 2 P.M.

ENTRANCE SUBJECTS

The standard of preparation is the four years' high-school course. The proper co-ordination of high-school subjects for the individual pupil is regarded as primarily a problem for the secondary school; the University is prepared to recognize for entrance credit any subject having an established place in the secondary school curriculum, in which adequate instruction is given and which is pursued to satisfactory results.

All Lower Division students (except students coming from other institutions with satisfactory credit in a college composition course) will be required to satisfy the University standard in English Composition. This may be done by passing a special matriculation test given during matriculation week. The examination will test the candidate's practical knowledge of spelling, punctuation, and sentence structure, and his ability to think consecutively on a simple subject. The subjects which are set at the time of the examination will be drawn for the most part from the candidate's own experiences.

A student who does not pass will be required to register in English A at the earliest available opportunity, and remain in the course until his work is of passing grade.

DEFINITION OF HIGH-SCHOOL SUBJECTS

The definition of high-school subjects given by the College Entrance Examination Board in its annual circular of information will serve as a standard. The following suggestions and explanations indicate the attitude of the University in judging entrance credentials, but no attempt is made to enumerate all the subjects which may be properly included in the high-school curriculum.

English.—The primary aim of instruction in English Composition in the secondary schools is clearness. Based upon grammatical correctness, which is the peculiar goal of elementary English Composition, this is the quality by which the Stanford matriculation test is rated. To attain these aims there should be a definite co-operation of the entire staff of the school.

The work in English Composition should be given at least two recitations a week throughout the entire high-school course. The greater part of the student's time outside of class should be devoted to practice in writing, but it is recommended that some attention be also paid to instruction in the fundamental principles of formal rhetoric.

The work in English Literature should be given an average of at least three recitations a week throughout the four years of the preparatory course.

It should be so conducted as to give the student not only an appreciative understanding of the books selected either for general or for more intensive study, but also a knowledge of their place in the history of English Literature, together with an ability to read aloud intelligently both prose and verse.

In the History of English Literature preparation should consist in a brief outline with a view to making clear the character and the tendencies of the more important literary epochs and associating the chief books and authors in their proper periods.

Mathematics.—The work in Mathematics is usually distributed as indicated by the following unit values: Algebra (1 to 2), plane geometry (1), solid geometry (½), trigonometry (½). Additional work may be offered in algebra and plane analytical geometry. The solution of numerous original problems and exercises is assumed throughout the course.

The Sciences.—In Physics, Chemistry, Physiology, Botany, Zoölogy, Hygiene, and General Science a full year's work in each is expected, comprising, preferably, two recitation periods and three double laboratory periods per week. Accurate notes of the laboratory work should be kept. Any two of the biological sciences (Physiology, Botany, Zoölogy) may be combined into a continuous year's course. Astronomy may be offered as a half-unit course.

Students who receive entrance credit in Chemistry, and who wish to continue the subject in the University, will be admitted at once to laboratory Course 4 and will be required to begin lecture Course 1.

In Physiology the textbook work should be accompanied by experiment, dissection of animals and organs, and a certain amount of study of the tissues with the microscope.

In Botany the main thing is that the work shall be of a practical nature: the study mainly specimens and not books. A study of the growth and development of the forms selected is of the highest importance, and should be made a prominent feature in the work. If possible, the pupil should be allowed the use of a compound microscope, but when this is not practicable, microscopic demonstrations by the instructor are indispensable.

In Hygiene the work should include adequate instruction in personal hygiene, the hygiene of occupation, and the relation of the citizen to the state in matters of sanitation and public health. Three periods per week of physical training and three periods in experimental laboratory work in Hygiene, and two recitations per week on Public Health, or an equivalent amount of work distributed over a longer period, will cover the requirements for one unit of credit.

History and Allied Subjects.—History should be offered in full unit courses covering respectively the following divisions: (*a*) Ancient, (*b*) European (either Medieval and Modern or Modern European), (*c*) English, (*d*) American. Civics may be offered as a part of American History, or as an additional half-unit course. Biblical History and Literature and Economics may each be offered as a half-unit or a unit course.

In the History subjects, in addition to the textbook preparation, the following exercises are recommended: Supplementary reading, including the use of original material where possible, notes and digests of reading; abstracts or analyses of specified chapters, both of the textbook and supplementary reading; outlines of subjects, gathering material from all available sources; map-drawing from printed data or comparison of existing maps, showing movements of exploration, migration or conquest, territorial

changes, or social phenomena. Such work should be regarded as a means rather than the end of historical study and in every instance should be adapted in character and amount to the stage of advancement of the class and of the individual pupil. As the pupil progresses in his study, more advanced work may well be required in the form of historical composition and of note-taking in the class from talks by the teacher or reports of fellow-pupils.

Spanish and French.—The elementary study of the languages, covering two years of daily recitations, should lay stress on the following points: (1) An accurate knowledge of the forms of the languages; (2) the elements of syntax; (3) the ability to turn easy English prose into French or Spanish; (4) the ability to translate ordinary French or Spanish into idiomatic English; (5) the ability to pronounce French or Spanish correctly.

(Students who have had one year of French in the high school and present one unit of credit for entrance into the University may take Course A2. Those who have had one year of Spanish in the high school and present one unit of credit for entrance may take Course B2. Those who have had two years of French or Spanish in the high school, and present two units of credit for entrance, may take second-year work in the University.)

The intermediate requirements are intended to represent a third year of daily recitations. The specific demands are: (1) A thorough knowledge of modern French or Spanish syntax; (2) the ability to turn ordinary modern French or Spanish at sight into idiomatic English; (3) the ability to translate connected English prose of moderate difficulty into French or Spanish; (4) the ability to write French or Spanish from dictation; (5) some facility in speaking the languages.

(Students who have had three years of French in the high school, and present three units of credit for entrance into the University, will ordinarily take Course A22. Courses A26 and A30 are also open to them. Students who have had three years of Spanish in the high school, and present three units of credit for entrance into the University, will ordinarily take Course B22. Courses B26 and B30 are also open to them.)

The advanced requirements will occupy a fourth year of daily recitations.

At the end of this course the student should be able: (1) To read at sight any standard author not earlier than the seventeenth century; (2) to write in French or Spanish a short essay on some simple subject connected with the works read; (3) to translate correctly a passage of modern English prose; (4) to carry on a simple conversation in French or Spanish; (5) to follow a lecture in French or Spanish.

The reading in the elementary course should cover from four hundred to six hundred duodecimo pages; in the intermediate course a similar amount should be read of prose and verse, a portion to be in the dramatic form; and in the advanced course the same quantity of prose and verse should be selected from standard authors not earlier than the seventeenth century, and these should be read with reference to their literary value.

The practice of writing compositions consisting in reproductions or paraphrases of the matter read should be begun in the intermediate course and followed by short themes along similar lines in the advanced course.

German.—Elementary German represents the work of two high-school years with daily recitations. It should give the following preparation: The ability to read understandingly at sight easy German prose and verse; an accurate knowledge of the most important elements of grammar, embracing especially inflections, word-order, and the essentials of syntax, as also

the ability to appreciate the force of prefixes and suffixes; the ability to express in correct German simple ideas concerning familiar things and to recognize German words and simple sentences when spoken. Careful attention should be given to pronunciation and accentuation.

The amount of work to be accomplished in the first year is approximately what is contained in a beginner's book such as Zinnecker's *Deutsch für Anfänger,* with some additional reading. The reading of the second year should be for the most part graded modern German from 200 to 300 pages. German should be the language of the classroom, instruction in conversation, composition, and grammar being based largely on the reading text.

Intermediate German represents a third year of daily recitations, designed to extend and strengthen the pupil's personal command of the language, and his knowledge of word formation and syntax. Here again the reading matter should be, in large measure, the center of the instruction, and some attention should be paid to literary appreciation.

Advanced German represents a fourth year of daily recitations. Besides rounding out the pupil's knowledge of grammar, and increasing his facility in speaking and writing, this course should make considerable addition to his passive vocabulary and develop his literary appreciation. It would be advisable to choose most of the reading from the works of recent or contemporary writers, but some work or works of Lessing, Goethe, and Schiller should be studied intensively, while others might be assigned for outside reading and report.

Latin.—The reading required in elementary and advanced Latin (4 units), without regard to the prescription of particular authors and works, is not less *in amount* than Caesar, *Gallic War,* I–IV; Cicero, the orations against Catiline, for the Manilian Law, and for Archias; Virgil, *Aeneid,* I–IV. An equivalent amount of reading from authors other than those specified above may be substituted. The following are suggested: Caesar, *Civil War;* Eutropius; Nepos; Terence; Phormio; Cicero, *Letters;* Sallust; Virgil, *Bucolics* and *Georgics;* Ovid, *Metamorphoses.*

Exercises in translation at sight should begin in school with the first lessons in which Latin sentences of any length occur, and should continue throughout the course with sufficient frequency to insure correct methods of work on the part of the student. From the outset particular attention should be given to developing the ability to take in the meaning of each word—and so, gradually, of the whole sentence—as it stands; the sentence should be read and understood in the order of the original, with full appreciation of the force of each word as it comes, so far as this can be known or inferred from that which has preceded and from the form and position of the word itself. The habit of reading in this way should be encouraged and cultivated as the best preparation for all the translating that the student has to do. No translation, however, should be a mechanical metaphrase. Nor should it be a mere loose paraphrase. The full meaning of the passage to be translated, gathered in the way described above, should finally be expressed in clear and natural English.

The school work in Latin should include much reading aloud, writing from dictation, and translation from the teachers' reading. Learning suitable passages by heart is also very useful, and should be practiced.

The work in composition should give the student a better understanding of the Latin he is reading at the time, if it is prose, and greater facility in reading. It is desirable, however, that there should be systematic and regular

work in composition during the time in which poetry is read as well; for this work the prose authors already studied should be used as models.

Greek.—In Elementary Greek (2 units) the following requirements should be covered: Grammar, the inflections, and the essential points of syntax; Xenophon's *Anabasis,* Books I–IV, or an equivalent; prose composition. It is expected of every pupil that he be able to read Greek aloud without stumbling.

In Advanced Greek (1 unit): Homer, *Iliad,* Books I–III, or an equivalent; advanced prose composition. The pupil should have a good acquaintance with the forms and syntax of Homer, and be able to scan any given passage exactly and to read it rhythmically. In the writing of Greek the pupil should have a year's training beyond that required in Elementary Greek.

Drawing and Applied Art.—In each of the drawing subjects (Freehand, Mechanical, and Architectural) a unit of credit represents daily double periods for a year or single periods for two years.

In Freehand Drawing approximately two-thirds of the time should be given to representation and one-third to decorative and constructive design. *Representation* should include: Object drawing, boxes, books, bowls, vegetables, machine parts, drawn in various positions with attention to perspective facts in line and also to light and shade; plant forms, seed pods, shells, insects, animals, and simple landscape, drawn in line, in light and shade, and in color; composition, exercises in arrangement and adaptation of pictorial subjects into good composition, using both rhythmic line arrangement and harmonious color. The style of drawing should be direct, facile, and effective, adapted to the thing drawn, with refinement in its proper place and vigor in its proper place. The pupil should be equally familiar with the use of pencil and charcoal or brush. *Design* should include (1) exercises in space filling, borders and all-over patterns with use of geometric and organic forms; (2) principles of constructive and decorative design applied to simple objects, such as, in printing, a title-page or program; in textiles, a stencil or embroidery design for a curtain or table-scarf; in wood, working drawings for a chair, table, clock-case, book-rack, etc.; in metal, cabinet hardware and lighting fixtures, etc. Talks supplemented by photographs of the best paintings and architecture, and talks upon taste in home furnishing and appointments, with visits to worthy examples, should supplement the course with a view to developing an enlightened taste in art.

In Mechanical Drawing the pupil is expected to acquire neatness and accuracy in the use of drawing instruments. This course should include practice in line work, lettering, machine or architectural working drawings, and tracing. Recognition, commensurate with the length of course and the degree of proficiency attained in the use of instruments, will be given, however, to courses consisting of line work, lettering, and the construction of geometric figures.

Shopwork.—Two things are expected: First, a knowledge of the materials and tools used, and a thorough understanding of the principles involved in the operation performed; second, manual dexterity, as evidenced by neatness, accuracy, and dispatch in the execution of a given piece of work.

Woodworking (½ unit) demands the ability to recognize the common varieties of wood, and some knowledge of their physical properties, such as ease of working, strength, toughness, hardness, etc., is expected. The

pupil should be familiar with the uses of the principal hand tools of carpentry, and, with care, be able to make the ordinary kinds of joints and splices, and be familiar with the operation of lathe, jig-, band-, and circular-saws, and planing machines.

Forge Work (½ unit) demands an elementary knowledge of the properties of wrought iron and steel, and of the proper heats at which to work them. The management of the forge and the fire and the nature and uses of all the ordinary blacksmithing tools should be known. The pupil should be able to execute all of the common forging processes, including the various forms of welds in iron and steel; he is also expected to understand hardening, tempering, and annealing.

Foundry Work (½ unit) demands a knowledge (1) of the tools and processes used in the ordinary forms of green sand molding and core work; (2) of the properties of cast iron, and experience in pouring cast iron as well as in molding. The pupil should have had practice in charging and operating the cupola.

Machine Shop Work (½ to 1 unit) demands a knowledge of the tools and processes used in the working of iron, steel, and brass. The pupil should be able to execute all forms of vise work, such as chipping, filing, scraping, fitting, and finishing. He should be familiar, through experience in operation, with the simpler forms of machine tools, such as the lathe, drilling machine, planer, shaper, and milling machine.

Agriculture, Horticulture, Domestic Science, Commercial Subjects, *Music.—The outline prepared by the University of California is suggested.

FEES, EXPENSES, AND AID FUNDS

APPLICATION, TUITION, AND COMMUNITY FEES

The Application Fee for all candidates for admission to the University, and for all registered students applying for admission to the Graduate Division, is $5, payable at the time of application.

The Tuition Fee for graduate students is $85 per quarter, with the following exceptions: $115 per quarter in the Graduate School of Business, and $100 per quarter in the School of Medicine.

The Tuition Fee for undergraduate students is $85 per quarter, except in the School of Medicine where the fee is $100 per quarter.

The Community Fee for all students, graduate and undergraduate (except as noted below), is $13 per quarter. This fee covers the privileges of the gymnasia, athletic grounds, hospitals, the Stanford Union or Women's Clubhouse, and membership in the Associated Students. There is also a Pavilion Fee of $1 per quarter assessed upon all undergraduates by the Associated Students. The Community Fee is not collected from students registered at the Hopkins Marine Station. Students registered in the School of Medicine at San Francisco are charged a Hospital Fee of $5 instead of the Community Fee.

In addition to the fees listed above, students in laboratory courses pay for the materials which they use, and in some courses syllabus and other fees may be charged. In medical courses a deposit ranging from $10 to $20 per annum is required to cover breakage or loss of apparatus and materials, such deposits being returnable, less charge for breakage, loss, or wear and tear of apparatus.

A Law Library Fee of $5 is charged all students majoring in the School of Law.

In the School of Medicine, students who have paid the regular fees in full, and wish to take additional work before graduation, will pay for this work such fees as are decided upon in conference with the Dean and Executive Head of the Department in which such courses are taken.

The General Fee for all students at Hopkins Marine Station is $85 per quarter.

A Diploma Fee of $5 is charged all persons receiving degrees from the University, except those who have enrolled for the first time in the graduate or undergraduate divisions of the University since January 1, 1927.

Refund of Fees

Students who withdraw from the University before the end of a quarter may receive refunds of portions of their fees, provided written requests are filed within two months of the time of withdrawal from the University. Refunds will be made according to the circumstances of the withdrawal, as follows:

1. *Annulled Registration.*—Students who withdraw from the University voluntarily within two days after the day of registration may have their registration annulled. The refund will be the tuition and community fees in full. Such students will not be included in the office records, and will not secure any privileges for admission for any subsequent quarter on the basis of being returning students.

2. *Leave of Absence.*—Leave of absence may be requested from the Registration Committee by any student in good standing at any time, but will be granted within four weeks of the end of the quarter only with the approval of the Scholarship Committee. When leave of absence is granted, effective within two weeks after the day of registration, the refund will be the fees paid less the following charges: Tuition, $10, Community, $9, Pavilion, $1; between two and four weeks after the day of registration, the refund will be the fees paid less the following charges: Tuition, $25, Community, $9, Pavilion, $1; thereafter there will be no refund allowed. Such students will be included in the office records, and may enroll in the University for any subsequent quarter with the privileges of a returning student.

3. *Cancelled Registration.*—Students who have their registration cancelled, or are suspended from the University, for cause, will receive refunds on the same basis as those receiving a leave of absence, unless otherwise specified in the disciplinary action taken. A student whose registration is cancelled within one week after the day of registration, for an offense committed during a preceding quarter, will receive a full refund of tuition and community fees.

4. *Provisional Registration.*—Students who have received permission to attend the University provisionally, pending the adjustment of their standing, and who are denied registration within two weeks after payment of fees, will receive a full refund of tuition and community fees. Such students will not be included in the office records. After two weeks they will receive refunds on the same scale as for a leave of absence.

Syllabus and laboratory fees (collected after the fourth week of the quarter) are not subject to refund. Chemistry laboratory fees, collected at the beginning of the quarter, are refunded on the order of that department on the basis of service and supplies which have been used. Fines may be refunded on the order of the authority under which they were imposed.

LIVING ACCOMMODATIONS AND EXPENSES

There are five dormitories for men (Branner, Encina, Toyon, and Sequoia Halls, and the Stanford Union) and one for women (Roble Hall), all under University management. In addition, there are fraternity and sorority houses, a privately conducted boarding house, and a number of rooms in private houses, where students may be accommodated with the approval of the University (consult the Dean of Men or the Dean of Women).

Undergraduate men, not living with parents or guardians, are expected to room in the dormitories. New Lower Division men entering the University in the autumn, are required to live at Encina Hall for the first three quarters and those entering in the winter, for the first two quarters. Rooms in the Union are available preferably for graduates and seniors. Application for rooms should be made to the Dean of Men several weeks in advance of the opening of the quarter, and should be accompanied by a remittance of $5, payable to Stanford University, which will be applied on the rental cost. Assignments will be made as vacancies occur. If no rooms are available applicants' names will be placed on the waiting lists and subsequent assignments will be made from these lists. Men students not rooming in the dormitories may live only in places approved by the University. The cost of rooms in the dormitories is from $18.50 to $36 per quarter (average cost $24 per quarter), but this may be increased without notice. Room rent is payable at the beginning of each quarter. Students living in the dormitories are

expected to supply their own linen and bedding for standard size single beds. Board may be obtained at the Stanford Union, Sequoia Hall, Encina Dining Hall, and in various clubs, the cost ranging from $30 to $40 per month. New Lower Division men who live at Encina Hall are also required to board there. The cost of board in the Encina Dining Hall, operated on a co-operative plan, is approximately $85 per quarter for a six-day service per week, and is payable in full at the beginning of the quarter or optionally in two installments, the amount of each installment and the time of payment to be fixed each quarter.

Roble Hall, the women's dormitory, is arranged either in singles or in suites of three rooms for two students. The application for room assignments in Roble Hall should be made to the Social Director and must be accompanied by a remittance of $5, payable to Stanford University, to cover a deposit fee which will be applied on room rent when registration has been completed. As rooms are assigned in order of application it is recommended that early application be made.

Undergraduate women not living with parents or guardians are required to reside in Roble Hall for three quarters. (Some modification of this requirement for the succeeding autumn quarter may be made for students entering in the winter and spring quarters.) Women students not residing in Roble Hall may live only in places approved by the University (consult the Dean of Women).

The rent for a room in Roble Hall, including a service fee, is $32.25 per quarter. Room rent is payable in advance for the quarter (for the summer quarter either in full or in two installments, $21 and $11.25, respectively). Deposit fees of $1 for key to the room and $1.50 for a pillow are required; both deposits may be refunded at the end of the quarter if the articles are returned in good condition. Students rooming in the Hall furnish couch covers, bed linen, blankets, towels, bureau scarfs, rugs, and curtains. White curtains, sold at cost, are uniform for the Hall and must be purchased of the House Director, except in the summer quarter when curtains are rented for $1. Also, for summer quarter students, a few rugs are available, and bed linen and blankets may be rented from the House Director at the rate of $3 for the first term or for the full quarter, but as the supply is limited no guaranties can be given that bedding will be available. It is advisable, therefore, to apply for bedding when making application for a room.

Board is approximately $85 per quarter, except for the summer quarter when it is $90, payable in advance for the quarter or in two installments ($45 and $40, or for the summer quarter, $56 and $34).

All residents in the Hall are members of Roble Club. In order to cover the cost of the informal entertaining of the club and of maintaining the additional telephone service desired by the club, the dues are $2.50 per quarter.

In Palo Alto, at an average distance of a mile and a quarter from the University, rooms can be obtained in private houses at from $12 to $25 per month. (Men students should consult the Stanford Y.M.C.A., and women students the office of the Dean of Women.) Special commutation tickets are issued by the Southern Pacific Company, and students living in towns on the line of the railway, from San Francisco to San Jose, easily go to and from the University daily. There is also trolley connection with San Jose, Los Gatos, and intermediate towns.

The cost of living for students of Medicine in San Francisco is about the same as at Stanford University. There are numerous rooming and boarding houses near the medical buildings.

(A guest suite is maintained at the Stanford Union and may be engaged by making reservations in advance. The guest suite, available for men, or man and wife, is composed of a sitting-room, bedroom, and private bath. Rates per night, $3 for one person, $3.50 for two; by the week, $21. Limit of two weeks. Reservations may be made with the Custodian. Additional guest rooms will be added to the Union accommodations as far as the campus housing problem permits and patronage is assured.)

Fixed Expenses Per Quarter

The following is an estimate of the expenses *per quarter,* for undergraduate men, *for the items named:*

	Medium	High
Tuition and Community Fees	$ 98.00	$ 98.00
Books, Syllabus Fees, etc.	15.00	30.00
Board	85.00	120.00
Room	18.00	45.00
Incidentals (other than clothing and railway fares)	35.00	50.00
Laundry and clothing	35.00	100.00
Total for the quarter	$286.00	$443.00

Laboratory fees are additional. The cost of board is variable and the estimate given for men is conservative, while a lower cost is possible in co-operative clubs. For women residing in Roble Hall room and board amount to approximately $110 for the quarter ($125 for the summer quarter). All undergraduates pay also the Pavilion assessment of $1 per quarter.

SELF-SUPPORT OF STUDENTS

A considerable number of students find it possible to earn the whole or a part of their expenses while attending the University. Success depends upon the student himself. The University, through the Appointment Secretary's office, and in other ways, is able to help the student both in finding work and in making plans. It cannot, however, assume the responsibility of supplying work for all applicants. The student who combines initiative with industry and reliability, and who is willing to adapt himself to circumstances, is the one who succeeds in this as in other undertakings. It is, however, the opinion and advice of those most closely in touch with the problem of student self-support that no new student should register unless he has sufficient means at hand or in prospect to carry him through his first quarter.

Students who are contemplating earning their own expenses at the University should not register for a heavy course nor attempt to engage in more than one student activity, particularly during their first quarter at the University. (Self-supporting students whose scholarship is high are given preference in the awarding of scholarships.) While it is an education in itself for the student to work his own way, there are many valuable features of college life that must be foregone in order to earn a living. Students who have the necessary means will do well to devote any energy not needed in their studies to various extra-curricular activities rather than to earning their expenses. Because the opportunities for self-support are limited the student should hesitate to take over a money-making position unless he really needs to do so.

The student is not advised to enter the University without a reserve fund to provide for immediate needs or unexpected contingencies. This fund ordi-

narily ought to amount to at least $250, although it is preferable for new students to have a larger sum. The student needs time to get acquainted; to become adjusted to University methods and requirements; to systematize his University work; to learn about the various opportunities for earning money; and to discover how much time he can afford to devote to self-support and still make study his main object aside from keeping in good health. In general the student should not undertake to earn a larger proportion of his expenses than is absolutely necessary, for his time is too valuable for this and should be devoted to his studies to the largest extent possible. It is recommended that no new student plan to devote more than four hours a day to earning his expenses.

One of the most popular means of earning board at the University, whether for men or women, is by waiting on table. From two to four hours per day will cover the required time, which comes when it is least missed. Such chances are to be found in the dormitories, in cafés and boarding houses, and in public and private eating clubs, though competition for such positions is severe. In connection with the University dining halls and dormitories, there are opportunities for employment as waiters, bus boys, cashiers, soda fountain clerks, telephone operators, and typists, at the established rate of pay, fifty cents per hour. (Application should be addressed to the Director of University Dining Halls, Stanford University, California.) New students should make application as soon as registration has been assured.

Other forms of work for the relatively unskilled are gardening, housework, care of children, janitor service, special jobs in connection with gymnasium and athletic activities, manual labor in connection with laboratory sections, agencies for laundries and other concerns. Positions requiring more or less preliminary training have to do with plain cooking, clerking, bookkeeping, stenography and typewriting, music for dances, newspaper reporting, printing, tutoring, and the management of student enterprises. Other means of support are found in the scholarships and fellowships offered, and through the loan funds now available. A limited number of opportunities during the short vacations, particularly at Christmas time, can be found in San Francisco and elsewhere, as special postoffice clerks or salesmen in the larger stores.

New students who must begin earning as early as possible will do well to be on hand a short time in advance of the opening of the University and to come equipped with bicycles and working clothes. They should enroll promptly with the Appointment Secretary, Room 170, in the Administration Building and continue to report at the office daily until sufficient employment is secured. Women should discuss their plans also with the Dean of Women.

Assistantships

Student-assistant positions in the various departments are available for either graduates or undergraduates. There are opportunities for assistants in teaching and laboratory work, assistants in quiz sections, in the reading of examination papers and reports, as well as a number of minor positions where mere labor without skill or special knowledge is required. These positions range in pay from $35 to $200 each per quarter, but are not ordinarily available to new undergraduate students.

Each department selects and recommends for appointment its own assistants. Requests for information as to pay and duties, and applications for appointment, should be addressed to the Executive Head of the department in which a position is sought.

TUITION NOTES

After the first quarter of registration in the University undergraduate students may defer payment of tuition fees by means of tuition notes. These notes, which cover tuition only and do not include community fees, are issued by the Dean of Men and the Dean of Women upon approval of the President. All undergraduates who are candidates for the degree of Bachelor of Arts may apply for tuition notes, with the following exceptions: Students registering at the Hopkins Marine Station, for Field Geology, or in the School of Medicine. Additional exceptions may be made in the future in the case of students registering for newly established courses.

Ordinarily, tuition notes are granted only to students who are contributing to their own support. Undergraduate students returning to the University after an absence of three or more quarters may not apply for tuition notes nor renew former applications until after one quarter of residence.

LOAN FUNDS

In general, cash loan funds are available only to applicants having a scholarship average of C or better, unless otherwise specified.

Loan Funds for Men and Women

Unless otherwise stated, application should be made to the Dean of Men:

Alumni Jordan Scholarship Fund.—The Alumni Jordan Scholarship Fund has been founded largely by physicians who were at one time students of Stanford University. Its purpose is to pay the tuition fees of several medical students of high standing, with the stipulation that at some future time the amount will be returned. The student who once receives this scholarship loan will be entitled to its use throughout his medical course, provided his work continues to be satisfactory. Application should be made to the Dean of the Stanford Medical School, San Francisco, California.

Stanford Alumni Association Graduate Loan Fund.—Loans are restricted to candidates for advanced degrees, including the A.M., J.D., M.D., and Ph.D. degrees, preference being given to candidates for the Ph.D. degree. In making loans emphasis shall be placed upon character, scholarship, and intellectual promise in addition to personal need.

Stanford Alumni Association Undergraduate Loan Fund.—"For worthy undergraduates."

Associated Students Undergraduate Loan Fund.—For the benefit of worthy undergraduates who are members of the Associated Students of Stanford University.

William Burton Barber Loan Fund.—Established in 1914 by Mrs. Anna M. Barber, in memory of her son, William Burton Barber, '02, "to provide for needy and worthy students." This fund, increased by over $5,000 from the estate of Mrs. Jeannette Taylor, is available for men and women of the senior class who have been registered in the University for at least one quarter.

Class of 1906 Loan Fund.—No restrictions except such as may be imposed by the Committee on Scholarship.

Horace Davis Loan Fund.—Mr. Horace Davis, charter member of the Board of Trustees, provided in his will a fund of $10,000, the interest of which is to be used as a loan fund for students.

George E. Farrand Loan Fund.—Established in 1928 by Mr. George E. Farrand for use by students upon such terms and conditions as may be determined by the Dean of Men, with interest at the rate of 6 per cent per annum until paid.

Richard Friedlander Memorial Fund.—Established in 1928 by the parents and friends of Richard Friedlander of the Class of 1926, for the purpose of aiding worthy students to complete their education. Interest at the rate of 6 per cent per annum until paid.

Dr. Robert Patek Memorial Loan Fund.—Established in 1921 by Mrs. Sadie Dernham Patek (Stanford, '11) in memory of her husband, Dr. Robert Patek. This fund, principal and interest, is to be loaned to medical students to assist them in completing their medical course. A student who has once received a loan from the Fund is entitled to receive additional loans until his graduation. The loans granted to students are to bear no interest for six years, then to carry an interest rate of 6 per cent until paid. Applications for loans are to be made through the President's Office.

John M. Switzer Student Loan Fund.—Mr. John M. Switzer (ex-'98) has presented to the Student Guild the sum of $500, which is to be used from time to time as an emergency loan fund to help tide over critical periods in the career of needy and deserving students who are trying to complete a course at Stanford.

Loan Funds for Women

Application should be made to the Dean of Women:

Chi Omega Loan Fund.—In 1927 the local alumnae of the Chi Omega sorority established a loan fund for the use primarily of senior women.

Delta Gamma Memorial Fund.—Established in 1926 as an emergency loan fund for women students.

East Bay Stanford Women's Club Loan Fund.—Established in 1925 by the East Bay Stanford Women's Club.

Harker Alumnae Association Loan Fund.—Established in 1917 by the Alumnae Association of Miss Harker's School, a large number of whose graduates have been Stanford students. There are no restrictions except that if a graduate of Miss Harker's School applies she shall be given preference, other qualifications being equal.

Alice Windsor Kimball Loan Fund.—Established in 1928 by a group of friends of Miss Alice Windsor Kimball. The fund is to be used primarily for graduate and senior women, but is available to any Stanford woman student recommended by the Dean of Women.

Women's Student Loan Fund.—The Women's Student Loan Fund was organized by the Women's Conference through private subscription, and is increased yearly by small sums earned by a committee of the Conference. It is available for small emergency loans.

Loan Funds for Men

Application should be made to the Dean of Men:

Dean of Men's Loan Fund.—An emergency loan fund administered by the Dean of Men upon approval of the President. Interest at the rate of 6 per cent per annum until paid.

Romaine Josephine Stanley Fund.—Established in 1928 by Dr. L. L. Stanley for the purpose of rendering financial assistance to deserving medical students.

SCHOLARSHIPS

Administered by Stanford University

Funds given to the University for a beneficiary designated by the donor may be administered as a scholarship, provided the candidate has a C average at this University; or, if not already matriculated, has been selected for admission. The tenure of such scholarships is subject to the rules governing other scholarships, except that new first-year students may be given two quarters to attain a C average.

Applications for the following scholarships, unless otherwise specified, should be addressed to the Secretary of the Committee on Scholarship, and should be filed by April 1; applications for the E. C. Converse, William S. Cranston Memorial, and E. W. Hopkins Scholarships, which are awarded to entering undergraduate students, should be filed by June 15.

Anglo-California Trust Company Scholarship.—In 1927 the Anglo-California Trust Company established a scholarship for the purpose of training college men for the banking field, with the idea that upon graduation an opening in the Anglo-California Trust Company will be available for graduates who hold this scholarship.

Preference is given to graduates of the high schools of San Francisco or the Bay region. The scholarship consists of the sum of $350 a year, to be given annually by the bank and to be supplemented by a position in the bank during the summer vacation period. The student is chosen by the Committee on Scholarship, subject to the approval of the Anglo-California Trust Company, and he is to state his desire to follow a course at the University to fit him for a banking career and also his desire to follow this career with the Company upon his graduation. The tenure of the scholarship may be terminated at any time either by the Company or by the student in case the circumstances warrant.

Bertha Hyde Braly Scholarship.—In 1916 Mrs. J. M. Braly, of Fresno, established an annual scholarship of $250 in memory of her daughter, Bertha Hyde Braly, '97. The amount of the scholarship was increased to $300 by Miss Elizabeth M. Braly in 1921. The scholarship is available for a woman student who is a resident either of Fresno County or Santa Clara County.

Cap and Gown Scholarships.—One scholarship established in 1924, and another in 1927, by the Cap and Gown Society, to be awarded annually to a woman student. The amount available is $300 each.

Colonial Dames Scholarship.—Established in 1923 and, either upon the recommendation of the Department of History or by competition, to be awarded annually to the student submitting the best paper on a subject in the field of colonial history. The amount available is $100.

E. C. Converse Scholarships.—In 1921 the University received a bequest of $50,000 from the estate of Edmund C. Converse for the establishment of the E. C. Converse Scholarship Fund. The income of this fund is to be used under the direction and at the discretion of the President or other ranking executive of the University, in the establishment and maintenance of scholarships not exceeding $500 per annum, to be paid to needy and deserving students. Ten undergraduate scholarships of the annual value of $250 each have been created.

Mabel Hyde Cory Scholarship.—In 1921 Miss Emma L. Martin, '97, and her sister established a scholarship of the annual value of $500, in memory of Mabel Hyde Cory, '96, who died February 15, 1921. This scholarship is to be awarded preferably to a needy young woman in the Department of History.

William S. Cranston Memorial Scholarship.—In 1924 Mr. and Mrs. William M. Cranston established a scholarship of the value of $500 annually, in memory of their son, William S. Cranston. This scholarship is to be awarded to an entering student.

George E. Crothers Law School Scholarship.—In 1917 Judge George E. Crothers, of the class of 1895, established a Law School Scholarship of $250 to be awarded annually. Application should be made to the Dean of the Law School.

Dickey Scholarships.—In 1914 the Trustees of the University received from the estate of the late W. J. Dickey, of Fresno, the sum of $10,000 for the establishment of the W. J. Dickey Scholarship Fund "to aid young men from Fresno County, preferably from Fresno city, to make their way through Stanford University." The fund provides for two scholarships of the annual value of approximately $250 each.

The donor has designated that the selection and appointment of candidates be made by the President of the University upon recommendation of the Committee on Scholarship, subject to the approval of the trustees of the Dickey Estate. The persons appointed must have been residents of Fresno County, preferably Fresno city, for at least two years prior to the appointment; and no scholarship may be held or shared by one person for more than four years. In accordance with the wish of the donor, the Committee in making its recommendation for appointments takes into consideration the character, scholarship, seriousness of purpose, and financial need of each candidate.

Henry G. Dodds Scholarship.—In 1921 Mr. Henry G. Dodds established a scholarship fund of $3,000 which in 1925 was increased to $5,000. The income from this fund (approximately $250) is to be awarded annually to a deserving young man preferably from the Pacific Coast.

Orrin W. Dunn Scholarship.—Established in 1923 by Mrs. Harriet L. H. Dunn to aid in meeting the expenses of young men (who must be unmarried) attending Stanford University and registered in any of the various departments of engineering, chemistry, geology, or medicine, with sufficient credit to entitle them to junior standing. The donor has provided that the holder of the scholarship shall be selected by the President of the University. The annual value of the scholarship is $300.

Mrs. Cordelia Elkus Scholarship.—In 1928 Mr. Charles deY. Elkus established a scholarship of the annual value of $250 in memory of his mother, Mrs. Cordelia Elkus. This scholarship is to be awarded to a worthy

and needy student, graduate or undergraduate, preferably one who is following or intending to follow the study of law.

Encina Club Scholarships.—In 1928 the Encina Club established two scholarships of $300 each for the academic year, 1928–29, to be awarded to the most needy and worthy members of the class of 1931.

Walter Mason Field Scholarship.—In 1927, Mrs. Nancy K. Field established a scholarship, of the annual value of $300, in memory of her husband, Walter Mason Field.

Hiram C. Fisk Scholarship.—In 1920 Mr. W. D. Fisk established a scholarship in memory of his son, Hiram C. Fisk, who is on the Stanford Honor Roll. The amount now available is $250 per annum.

Florence Hecht Fries Scholarship in Medicine.—In 1925 Mrs. Dorothy Fries Lilienthal established a scholarship fund of $5,000 in memory of her mother, Mrs. Florence Hecht Fries. The income of this fund ($300) is to be awarded annually to a worthy and needy student preparing for the profession of medicine, the selection being made by the President of the University or by a properly authorized committee.

Gertrude Gardiner Scholarship.—In 1920 Miss Gertrude Gardiner established a scholarship of the annual value of $200, to be known as the Gertrude Gardiner Scholarship, and to be awarded to a non-sorority woman who has been a student in the University for at least two quarters and who is a resident of Roble Hall.

William F. Herrin Scholarship Fund.—In 1925 the University received from Mr. William F. Herrin, of San Francisco, a gift of $4,500, the income to aid deserving students who need or require such aid in order to obtain or complete their education. The annual value of the scholarship is $315.

Brodie G. Higley Scholarship.—In 1915 Mr. Brodie G. Higley, of the class of 1899, established, through the Alumni Association, an annual scholarship of $150, "open to either a man or woman undergraduate student who is in good and regular standing in the University, and to whom the money will be a real assistance." In 1919 Mr. Higley deposited with the Board of Trustees securities to the amount of $3,000 to perpetuate this scholarship.

The selection and appointment of the Brodie G. Higley scholar will be made by the President upon the recommendation of the Faculty Committee on Scholarship. Appointment will be made for the college year, but may be terminated earlier on recommendation of the Committee and at the discretion of the President.

Applicants for the scholarship must have been registered in the University for at least three quarters prior to the time of application. In making appointments it will be the purpose of the University to emphasize character, scholarship, and intellectual promise, as well as personal need. Ordinarily the scholarship will be payable in six equal installments, beginning October 1. Applications should be filed with the Academic Secretary of the University.

E. W. Hopkins Scholarships.—In 1923 the University received from Mr. E. W. Hopkins a gift of $25,000, the income to be used for paying the tuition of needy students. Five scholarships for entering students, of the annual value of $250 each, have been established.

Charles Andrews Huston Memorial Scholarship.—Established in 1923 by Mrs. Margaret Huston as a memorial to her husband, Charles Andrews Huston, for many years Professor of Law and Dean of the Stanford Law School. The holder is to be either a graduate or an undergraduate student in

the Law School, nominated by the faculty and approved by the Committee on Scholarship. Provided he meets the minimum requirements for holders of University scholarships, the holder need not be chosen primarily for scholarship rating, but for high personal, social, and professional ideals and for interest in cultural fields outside his professional work. The annual amount available is $200. Application should be made to the Dean of the Law School.

Mrs. S. Baylor Keenan Scholarship.—In 1928 Mrs. S. Baylor Keenan established a scholarship of the amount of $200 for the winter and spring quarters of the academic year 1927–28. In 1929 the amount of $100 was available for the spring quarter, 1928–29.

Ira S. Lillick Scholarship.—In 1920 Mr. Ira S. Lillick, of the class of 1897, established a scholarship, of the value of $500, to be awarded annually to a worthy student, preferably in Law. Application should be made to the Dean of the Law School.

Mrs. Ira S. Lillick Scholarship.—In 1920 Mrs. Ira S. Lillick established a scholarship, of the value of $500, to be awarded annually to a worthy student, preferably in Law. Application should be made to the Dean of the Law School.

Ernest A. Love Scholarship.—In 1920 Mr. and Mrs. Allan Love founded a scholarship, of the annual value of $150, in honor of their son, Ernest A. Love, '18, who died in service in France. This scholarship is open to worthy and needy undergraduate men, preference being given to students from Arizona.

Mrs. McDowell Roble Club Scholarship.—The sum of $150 per year has been presented to the University by Mrs. John E. McDowell for the purpose of establishing a scholarship to be granted to a Roble Club member who has been a student in the University and a resident of Roble Hall for two years, the award being made at the close of the junior year.

Memorial Scholarship.—The trust establishing the Leland Stanford Junior Memorial Scholarship provides a fund of $6,000, the income of which shall be used "to pay the living expenses, cost of books, fees, and other necessary expenses of the holder." Under the present arrangement the Memorial scholar receives in cash $100 per quarter, or a total of $300 for the academic year. In addition the trust sets aside a room in Encina Hall for the use of the holder of the scholarship and for which no charge is made. Other things being equal, a student who has held the scholarship satisfactorily for one year shall have preference for the next.

Dorothy Metz Scholarship.—In 1920 Mrs. Lillian C. Metz established an annual scholarship, of the value of $200, in memory of her daughter, Dorothy Amanda Metz, '17, who died in service, the scholarship to be awarded "to a worthy and ambitious student of limited means." In 1925 an endowment of $5,000 was left by Mrs. Metz in her will which increased the value of the scholarship to $250.

Robert S. and Florence Moore Scholarships.—In 1925 the University received from Mr. and Mrs. Robert S. Moore a fund of $3,000, the income to be applied to the support of some worthy student. The annual value of the scholarship is $140.

Maud Huntsberger Peck Scholarship.—Established in 1926 by Mrs. Maud Huntsberger Peck, '08. The annual value of the scholarship is $300.

P.E.O. Scholarship of the Santa Clara District.—Established in 1926 by the P.E.O. Sisterhood of the Santa Clara District, to be awarded annually to a woman student who lives in the district. The amount available for the academic year 1928–29 is approximately $300.

Regional Scholarships.—These scholarships may be awarded to persons who meet the minimum requirements for admission to the University (fifteen acceptable high-school units), and who need this help in order to enter the University. Nominations and funds for regional scholarships will be received from the organized alumni of the region.

Dr. Emmet Rixford Scholarship Fund.—In 1921 Dr. Emmet Rixford, Professor of Surgery in the Stanford Medical School, made a gift of $500, to be awarded annually to some graduate of Stanford Medical School or to some staff member of rank under that of assistant professor, to be chosen by the medical faculty, for work on some surgical problem, anatomical, physiological, pathological, or clinical, the problem to be approved by the faculty. In 1928 the unexpended balance of the fund, amounting to $1,000, was placed in a permanent fund to draw interest until such time as additional gifts will make the income sufficient to support an annual scholarship or fellowship.

San Francisco Lodge, No. 3, B.P.O.E. Scholarship.—Established in 1924, for a San Francisco boy, provided "that he be worthy, that he be in need, and that he be of good strong character." In 1925 a second scholarship was established. The amount available annually for each scholarship is $500. No application is necessary.

San Francisco Polytechnic High School Scholarship.—In 1928 the Polytechnic High School of San Francisco established a fund of $3,000, the income to be devoted to an annual scholarship, preferably for a graduate of the Polytechnic High School. The amount available annually is $180.

Margaret Sidney Scholarship.—Established in 1924 by Miss Margaret Lothrop in memory of her mother, Mrs. Daniel Lothrop. The preference is to be given a woman student who is interested in writing as a life work. The amount available is $300 annually.

Leon Sloss Fund.—In 1922 Mrs. Bertha G. Sloss established a fund of $5,000 in memory of Mr. Leon Sloss, one of the original trustees of the University, the income to be awarded annually to a needy student. At present this fund is being administered by the Scholarship Committee. The annual amount available is approximately $275.

Stanford Mothers' Club Scholarships.—In 1928 the Stanford Mothers' Club established two scholarships of $100 each for the autumn and spring quarters, 1928–29.

Stanford Resident Alumnae Scholarship.—In 1925 the Stanford Resident Alumnae voted to offer annually a scholarship, of the value of $300, preferably for a woman student.

Stanford Student Chapter of the American Society of Civil Engineers Scholarship.—Established in 1925. The amount of $360 is available annually. Application should be made to the President of the Stanford Student Chapter of the American Society of Civil Engineers.

Stanford Women's Club of San Francisco Scholarship.—The provisions of this scholarship, established in 1924, stipulate that it shall be awarded preferably to a San Francisco girl and that the need of the student shall be the chief concern. The amount available annually is $150.

John Maxson Stillman Scholarship in Chemistry.—Established from the Stillman Testimonial Fund, presented to Professor John Maxson Stillman by graduates and former students in chemistry, and by others, on the occasion of his retirement from active service in the University, in May of 1917. The amount available is $150 per year, and the scholarship is open to undergraduate or graduate students in the Department of Chemistry upon nomination by the department faculty and approval of the President. Application should be made to the Executive Head of the Department of Chemistry.

Palmer Wilkinson Taylor Scholarship Fund.—In 1927, the Trustees of the University received from the friends of Palmer Wilkinson Taylor, '19, a fund of $2,200, the income ($100) to be used for the establishment of an annual scholarship in his memory. The scholarship is to be awarded to a worthy student of the University, who shall be nominated by the President of the Stanford Chapter of the Sigma Nu fraternity.

Harry A. True Memorial Scholarship.—In 1927 Miss Helen E. True established a scholarship, of the annual value of $300, in memory of her father, Harry A. True. This scholarship is to be awarded to a needy and worthy student of the University.

University Graduate Scholarships.—In 1919 the Trustees of the University established for graduate students thirty Stanford scholarships, each paying $200 per year of three quarters, awarded for a term of one year, and allowing for the scholar's reappointment at the expiration of this time. In 1927, the Trustees established six University Graduate Scholarships of the value of $100 per quarter for four quarters. Holders of these scholarships are required to pay tuition and community fees, the graduation (diploma) fee, laboratory expenses, and all similar charges laid upon other graduate students.

Charles W. Willard Scholarship.—In 1925 the University received from the partners and family of the late Charles W. Willard a gift of $5,000, the income to be used to establish a graduate scholarship for advanced study in administrative, public health, or social service work. This scholarship is to be given only to graduates of the Stanford School of Nursing who, in the opinion of the Superintendent of the Hospital and the Superintendent of Nurses, are best qualified to pursue such advanced course of study. The annual amount available is $250. Application should be made to the Superintendent of Nurses, Stanford School of Nursing, San Francisco.

Henry Windt Junior Memorial Scholarship in Engineering Chemistry.—In 1927 the University received from Henry and Viola Windt a gift of $8,500, to establish a scholarship fund in memory of their son, Henry Windt, Junior. The income ($400) is to be awarded annually to a worthy student engaged in the study of engineering chemistry.

Administered by Other Institutions

Harvard Club Scholarships (for students residing in the neighborhood of San Francisco).—The Harvard Club of San Francisco offers two scholarships, of the annual value of $400 each, to students desirous of pursuing undergraduate studies in Harvard College, or postgraduate studies in Harvard University. Other things being equal, preference will be given to undergraduates. In awarding these scholarships the scholarly attainments of the applicants, as shown by their records, their character, needs, and general development will be considered. Applications should be made in writing, not

later than February 15, to the Chairman of the Scholarship Committee of the Harvard Club of San Francisco, Mr. George S. Potter, 82 New Montgomery Street, San Francisco.

Rhodes Scholarships.—Under the will of the late Cecil Rhodes two scholarships are assigned to each state and territory in the United States. Each scholarship has a yearly value of £350, and is tenable at any college in the University of Oxford for three successive academic years.

Candidates must be unmarried, must be citizens of the United States, and must be not younger than nineteen nor older than twenty-five on October 1 of the year in which they are elected. All scholars, before going into residence, shall have reached at least the end of their sophomore year at some recognized degree-granting university or college. In accordance with the wish of Mr. Rhodes the trustees desire that "in the election of a student to a scholarship, regard shall be had to (1) his literary and scholastic attainments; (2) his fondness for and success in manly outdoor sports, such as cricket, football, and the like; (3) his qualities of manhood, truth, courage, devotion to duty, sympathy for and protection of the weak, kindliness, unselfishness, and fellowship; (4) his exhibition of moral force of character and of instincts to lead and take an interest in his schoolmates during school days."

FELLOWSHIPS

Administered by Stanford University

American-German Student Exchange Fellowship.—With funds donated by friends of the University for the purpose of furthering international understanding and good will, the Trustees of this University have established the American-German Student Exchange Fellowship. This fellowship is open to graduates or advanced students of German universities who desire to spend one year in advanced study and research at this University. The fellows are selected by the University authorities representing the Exchange in Germany.

Buckel Fellowship.—In 1914 the University established through the cooperation of the trustees of the estate of Dr. C. Annette Buckel, a research fellowship for the study of backward and feeble-minded children. The annual income from the Buckel estate is supplemented by a sum appropriated by the Trustees of the University, making the total amount available for the fellowship $500. Application should be made to the Executive Head of the Department of Psychology.

DuPont Fellowship in Chemistry.—In 1928 E. I. duPont de Nemours and Company established a fellowship in Chemistry for the academic year, 1928–29. The value of the fellowship is $750.

Fellowships in School Administration.—In 1919 a fellowship was established jointly by Professor Cubberley and the Board of Trustees, of the annual value of $500, and known as the Fellowship in School Administration. In 1924 a second fellowship of the same character and amount was established by similar joint action. Application for these fellowships should be made through Professor Cubberley.

Fellowship in the Study of Gifted Children.—In 1919 a fellowship for the Study of Superior Children was established jointly by Professor Terman and the Board of Trustees, the amount available varying from year to year. Application for this fellowship should be made through Professor Terman.

Food Research Fellowships.—From time to time the Food Research Institute has funds available for one or more fellowships, awarded for three quarters for the purpose of promoting research upon food problems. Application should be made to the Executive Secretary, Food Research Institute.

High-Voltage Laboratory Research Fellowship.—In 1926 through an anonymous gift a fellowship carrying an annual stipend of $500 was established in the Electrical Engineering Department and designated by the authorities of the University the "High-Voltage Laboratory Research Fellowship."

The department promulgates high-voltage laboratory research in two categories:

I. Research undertakings as a department, in some or all of which the hearty co-operation of the holder of this fellowship will be desired.

II. Research undertakings with the approval, support, and guidance of the department to permit the definition and solution of a problem of particular interest to the individual student and of promise of helpfulness in education and practice. Application should be made to the Executive Head of the Department of Electrical Engineering.

Donald Porter Jacobs Research Fellowship.—In 1928 a gift of $5,000 was made by Mr. and Mrs. Albert P. Jacobs to establish a research fellowship fund in memory of their son, Donald Porter Jacobs. The income of this fund ($240) is to be awarded annually to a worthy graduate student in whatever field of study may seem most desirable at the time.

Eric Knight Jordan Research Fellowship in Geology.—In 1926 Dr. and Mrs. David Starr Jordan established a fellowship fund in memory of their son, Eric Knight Jordan, to be awarded annually. The amount available for 1928–29 is $350.

Physical Therapy Fellowship.—This gift, established by an anonymous donor in 1923, and to be known as the Rehabilitation Fund of the Medical School, provides a fellowship for six months. The amount available is $300. Application should be made to the Dean of the Stanford Medical School, San Francisco.

Royall Victor Fellowships.—In 1927, under the will of Charles F. Brooker, the sum of $117,054 was bequeathed to the University to establish the "Royall Victor Fund" in memory of Royall Charles Victor of the class of 1900. The annual income of this fund ($5,600) is to be used in providing fellowships for students of ability, character, and moderate means, preference being given to candidates, if any, of the requisite qualifications who reside or have resided in the state of Connecticut.

Thomas Welton Stanford Fellowship in Psychic Research.—From the "Psychic Fund," created by Mr. Thomas Welton Stanford, in 1913, the Trustees have established this fellowship for research in psychic phenomena.

Teaching Fellowships in Chemistry.—The Board of Trustees established in 1917 two teaching fellowships, of the annual value of $600 each, in Chemistry. Application should be made to the Executive Head of the Department of Chemistry.

Teaching Fellowships in Mathematics.—In 1926 the Department of Mathematics established two teaching fellowships of the annual value of $750 each. Application should be made to the Executive Head of the Department of Mathematics.

University Fellowships.—The Trustees of the University established in 1917 two University fellowships, and in 1919 six additional fellowships, of the value of $750 each per year of three quarters, to be awarded annually by the Committee on Graduate Study for the purpose of fostering advanced study and research in the University. In 1925 four additional fellowships of the value of $400 each were established. In general these fellowships will not be awarded to students in their first year of graduate study. Application should be made to the Committee on Graduate Study not later than March 1.

William Roberts Eckart Research Fund for Mechanical Engineering.—Together with his mother, sister, and two brothers, Professor W. R. Eckart, of the Department of Mechanical Engineering, established this fund, in 1923, as a memorial to his father, William Roberts Eckart, the income each year to be applied toward the furtherance of research in the Department of Mechanical Engineering, either by grants for research, for scholarships or fellowships, for prizes, or in any other manner which, in the judgment of the President of the University and the full professors of the Department of Mechanical Engineering, may seem most desirable to produce the best results.

For the present, the donors suggest that: (1) a prize of $50 or more, depending upon the amount of interest available, be awarded to that student in Mechanical Engineering presenting the best thesis during each college year, this award to be known as the "William Roberts Eckart Prize in Mechanical Engineering"; (2) in judging the merits of the various theses submitted, the following points be considered: "conception, originality, analysis of problem, method of attack, experimental work, presentation of data, and results and conclusions drawn from same"; (3) the awards be made by a committee consisting of the full professors of the Department of Mechanical Engineering; (4) no award be made in any year in which no thesis of sufficient merit, in the judgment of the committee, is presented.

Administered by Other Institutions

American Field Service Fellowships for French Universities.—The American Field Service Fellowships have been established in order that advanced American students may avail themselves of the great advantages offered by the French universities in every field of science and learning. The fellowships are open only to men. A candidate (1) must be a citizen of the United States or of one of the United States' possessions; (2) must at the time of making the application be a graduate of a college of recognized standing or of a professional school requiring three years of study for a degree, or, if not qualified in either of these ways, must be twenty-four years of age and must have spent five years in work requiring high technical skill; (3) must be of good moral character and intellectual ability, and of suitable personal qualities; (4) must have a practical ability to use French books, both in general subjects and in his special field, and be able to speak French and understand lectures delivered in French.

Each fellowship has an annual value of $1,200 and is tenable for one year, with possibility of renewal for a second year if circumstances are favorable. Candidates should apply before January 1, to Archie M. Palmer, Assistant Director, Institute of International Education, 2 West Forty-fifth Street, New York City.

Commission for Relief in Belgium (C.R.B.) Fellowships.—In 1919 there was established an exchange of graduate students between Belgian and

American universities under the auspices of the C.R.B. Educational Foundation, Inc. Application for these fellowships for Americans should be made before December 15 through the President's office, or directly to the Secretary of the Foundation, 42 Broadway, New York, N.Y.

John Simon Guggenheim Memorial Foundation Fellowships.—In 1925 Senator and Mrs. Simon Guggenheim announced a preliminary gift of $3,000,000 for the endowment of the John Simon Guggenheim Memorial Foundation Fellowships, in memory of their son. The purposes of the Foundation are "to improve the quality of education and the practice of the arts and professions in the United States, to foster research, and to provide for the cause of better international understanding."

The fellowships are open to both men and women, ordinarily between the ages of twenty-five and thirty-five, who have shown marked ability in their particular subject, and are available for study in any country in the world. The principal obligation imposed on the holders of fellowships is that they shall produce contributions to knowledge in their special subjects and, secondly, that they shall make the results of their studies publicly available.

The annual value of each fellowship is approximately $2,500. Application should be made to Henry Allen Moe, Secretary, John Simon Guggenheim Memorial Foundation, 551 Fifth Avenue, New York City.

GENERAL REGULATIONS

REGISTRATION

On the appointed registration days in October, January, April, and June, each student must obtain a certificate of registration *in person* at the Registrar's office.

Matriculated students may register after the appointed registration days upon payment of a special fee: two dollars on the first or second day, three dollars on the third day, four dollars on the fourth day, and so on up to the maximum of ten dollars. Registration of undergraduates (including special students) will not be permitted later than three weeks after the beginning of instruction. (For the summer quarter, registration is limited to one week for students enrolling for the first term only; two weeks for those enrolling for the whole quarter.) Places are not held for women, or for new Lower Division men, after the regular registration days, except by permission of the Committee on Registration granted in advance.

STUDY-LIST CARD

At the Registrar's office the student receives a card for selection of studies for the quarter. This card, properly filled out, and approved for Lower Division students by the Committee on Lower Division Administration, for others by the Major Department, must be filed with the Registrar at the time of registration; but late study cards will be accepted upon payment of a special fee of two dollars. Students registering late are admitted to particular classes only by permission of the instructor concerned. All work for which university credit is desired must be duly registered.

ENROLLMENT IN CLASSES

A student desiring to enroll in any class presents his certificate of registration to the instructor at the beginning of each quarter. (In certain Lower Division classes he must also present the seat card issued by the Lower Division Committee which assures enrollment.) Whether the student is qualified for enrollment in a particular class is a question to be decided by the instructor in charge. In general the prerequisites for taking any given course are noted under "Courses of Instruction."

CHANGE OF STUDIES

A student desiring to drop a subject once taken up, or to take up a new subject after the study card has been filed, must present to the appropriate committee a petition for such change, approved by the major department and by the instructors whose subjects are to be taken or dropped. In general, petitions so approved, and not involving courses required of Lower Division students, if they do not give the student too many unit-hours, or too few unit-hours, and if presented within two weeks after the beginning of the quarter, are granted without question. At the end of the first two weeks all study-lists are to be considered as fixed. After this period petitions to drop or take up courses are granted only for extraordinary reasons, and only on payment of a special fee of two dollars for each course; if otherwise ac-

ceptable but presented after the close of the quarter, they will be granted only on payment of a special fee of four dollars for each course. During the last four weeks of the quarter no courses may be officially removed from the student's study-list for any reason whatever; but if failure to complete a course satisfactorily be due to illness or other unavoidable circumstance, application may be made to the Committee on Scholarship for such relief as shall seem equitable.

CHANGE OF MAJOR SUBJECT

Petitions to change the major subject will be granted when approved by the departments in charge of both the old and the new subjects, the student being held to all the requirements of the new major subject.

AMOUNT OF WORK

Graduate students are not held to any prescribed number of units, but ordinarily registration will not be permitted unless such students are prepared to devote at least half of their working time to university study.

The normal amount of work to be registered for each quarter by undergraduate students is fifteen units. Registration by undergraduate students for less than thirteen units of work is permitted in the case of students doing outside work for self-support, where considerations of health are involved, or for other reasons satisfactory to the Committee on Registration. All such programs of study must be approved by the Major Department or Lower Division Committee, and by the Committee on Registration.

Maximum limits upon the number of registered units which may be counted toward the 180 units required for graduation apply to the following classes of students:

1. Students in their first quarter of residence.—Upper Division students limited to 18 units; Lower Division students, to 16 units.

2. Students whose previous Stanford record falls below an average grade of B (grade-point rating of 2).—Limited to 18 units (except as noted below under 3).

3. Students who have completed at least 123 of the 180 units required for graduation, and whose previous Stanford record reaches an average grade of C+ (grade-point rating of 1.5); or whose record reaches in the three preceding quarters of residence an average grade of B (grade-point rating of 2).—Upon application to the Committee on Registration may be granted permission to undertake completion of the work for the degree of Bachelor of Arts in three quarters; students who have completed 140 units, under the above conditions, may apply for completion of the work in two quarters; students with 159 units, in one quarter.

4. Students whose previous Stanford record reaches an average grade of B (grade-point rating of 2).—Counting value of approved program of study not restricted.

The grade-point rating is obtained by dividing the total number of grade points received by the number of registered units. The total number of registered units is the sum of all units registered for each quarter, less those which have been dropped by permission.

Petitions for irregular registration are to be presented at the beginning of the quarter.

Every unit for which credit is given is understood to represent approxi-

mately, for the average student, three hours of actual work per week, through one quarter. Thus, in lecture or recitation work, for one unit of credit one hour per week may be allotted to the lecture or recitation and two hours for preparation or subsequent reading and study on the part of the student; but if a less amount of time is allotted for preparation or subsequent reading or study, there shall be a proportionate decrease in the amount of credit. Where the time is wholly occupied with drawing, field, or laboratory work, or in the classroom work of conversation classes, three full hours per week through one quarter are expected of the student for each unit of credit; but where such work is supplemented by systematic outside reading or experiment under the direction of the instructor, such a reduction may be made in the actual drawing, field, laboratory, or classroom time as seems just to the department concerned.

INDEPENDENT STUDY PLAN

Any student in the Upper Division whose university record is of an average B grade, or who is deemed by his school or department to be specially qualified may, with the consent of the school or department, and with the approval of the Committee on Independent Study, enroll under the Independent Study Plan. This may be done at the beginning of the junior year, or at the beginning of any quarter thereafter, but it is urged that arrangements for enrollment be completed at the end of the preceding quarter.

The plan of study is arranged with the intention of providing a program of work both more comprehensive and more intensive than that of the average student, calling for greater initiative, more self-direction, a higher type of thinking, and leading to a comprehensive final examination or examinations. A faculty member of the school or department is the special adviser of the student. The student is supervised in his work through reports, theses, discussions, and conferences with the adviser, or, and to the extent that may be determined, through meeting the regular tests in particular courses.

SCHOLARSHIP HONORS

High scholastic attainment is recognized by the University in the following ways: By awarding honors upon the completion of the Lower Division, to about the upper tenth of the class; by conferring the degree of Bachelor of Arts "with distinction" upon about one-tenth of the graduating class, "with great distinction" upon about one-twentieth of the graduating class.

SCHOLARSHIP GRADES AND GRADE POINTS

In reporting the standing of students at the end of each quarter the following grades are used: A, B, C, D, passing grades, corresponding in a general way to the terms, "excellent," "good," "fair," "barely passed"; + passed (without defining grade); ± conditioned; (—) failed. In grading classes, A is considered as normally applicable to not more than 15 per cent, B and C to 35 per cent each, and D to 15 per cent of the students of passing grade. (This distribution of grades is advisory, and is understood to admit of a certain degree of flexibility in the handling of small or advanced classes.)

Grade points are assigned to units of credit according to the quality of the work done, as follows: Units passed with a grade of A are given three grade points each; with a grade of B, two grade points each; with a grade of C, or +, one grade point each; with a grade of D, no grade points. For

work marked "conditioned" or "failed," no grade points are given. A condition removed does not count grade points, no matter what the final grade may be. (Advanced credit for work in other institutions counts one grade point for each unit of credit.)

CONDITIONS AND INCOMPLETES

A student conditioned or reported incomplete in any subject must remove the deficiency within one calendar year (interpreted as the succeeding four quarters of actual attendance), or the work will be considered a failure.

A deficiency due to failure to take or pass a written (final) examination is removed by passing a similar test on the same work. This may be done by taking a regular class examination in the course if repeated in time, or a special written examination to be held at any time after the third week of any quarter. A student is entitled to one examination within the year, either regular or special.

Where deficiencies are due to failure to take or pass an oral examination, the time for holding a new oral examination to remove the condition or incomplete, is determined by the instructor concerned. Compliance with the regulations for written examinations, so far as practicable, is required.

Deficiencies due to other causes may be removed by any work or test satisfactory to the department concerned.

Only one examination to remove a condition is permitted. If an examination to remove an incomplete results in a condition, but one examination is allowed to remove it. Instructors will report grades on all such examinations to the Registrar. Any deviation from these regulations requires the approval of the Committee on Scholarship.

SCHOLARSHIP REPORTS AND NOTICES

At the end of the quarter each department is notified of all serious deficiencies in scholarship affecting students whose major work is in that department.

When a student is reported as seriously delinquent in scholarship, the fact is communicated to his parent or guardian.

PROBATION AND DISQUALIFICATION

Standard work is obtaining fifteen units, with as many grade points as registered units, per quarter. This standard applies to each quarter and also as an average standard to be maintained on the entire record of the student.

At the end of any quarter in the University a student who fails to obtain twenty-two counts (the sum of units and grade points) is placed on probation. At the end of the first or second quarter he is considered as failing in his studies, and is disqualified for further attendance at the University, if he does not obtain ten counts. At the end of subsequent quarters less than fifteen counts will result in disqualification.

At the end of the second and every subsequent quarter the student's entire accomplishment is compared with what would have been obtained had he done standard work. If he is above, at, or even slightly below standard, his scholarship standing is considered normal. But if his deficiency becomes considerable the result is probation, and in serious cases disqualification.

Application for reinstatement is not ordinarily considered until the end of three quarters after disqualification. Reinstatement is granted only upon

satisfactory evidence that the student has employed the period of absence from the University usefully, either in attendance at another educational institution or in some gainful occupation. Work in another institution must reach an average quality halfway between passing and one hundred; or, if the institution is a member of the Association of American Universities, one-third above passing. Work outside of a college or university must amount to at least seven months, and must show diligence, ability, and maturity of purpose.

A student who incurs a second disqualification is not eligible for reinstatement.

LEAVE OF ABSENCE IN CASE OF DELINQUENT SCHOLARSHIP

Leave of absence will not generally be granted to a student on probation, nor to any student whose work during the current quarter is unsatisfactory, unless applied for at least four weeks before the end of the quarter.

FROM SPECIAL TO REGULAR STANDING

Special students may be entered in regular standing on passing examinations in the required number of entrance subjects, provided such examinations are passed not later than two years after matriculation. (Entrance examinations are given in June by the College Entrance Examination Board; in September by the University, using the comprehensive question papers prepared by the Board.) In place of entrance examinations, university work to the amount of seven units for each entrance unit may be offered in university subjects which are also included in the entrance group. In case the student has met all Lower Division requirements, a request for change from special to regular standing involving a program leading to the Bachelor's degree may be granted without an arbitrary number of additional hours for graduation.

UNIVERSITY CREDIT FOR EXTRA ENTRANCE SUBJECTS

High-school subjects offered in excess of the fifteen units required for undergraduate standing may be credited toward graduation, with a maximum of seven university units for one entrance unit, under the following conditions: (1) The subject must anticipate a course or courses given in the University (e.g., advanced mathematics, the laboratory part of elementary chemistry, or a foreign language); (2) the student, during his first six quarters in the University, must either pass the regular quarterly examinations in the corresponding course, or else complete an advanced course in the University in the same subject with a grade not lower than B. Additional high-school units earned after matriculation may be offered only by special students and for the purpose of making up entrance deficiencies.

UNIVERSITY CREDIT FOR SPECIAL COURSES

Matriculated students on leave of absence may take work in other universities, usually without any restrictions other than those imposed by the institution in question.

Work of a special character taken outside of regularly scheduled classes, *in absentia* or during vacation periods, may be credited under the following conditions: (1) The work must be acceptable as part of the major requirements for the degree of Bachelor of Arts in the department whose courses

it parallels or supplements, must be given necessary supervision and direction by such department and subjected to tests equivalent to those in regularly scheduled courses, and must be approved by the major department and by the Committee on Admission and Advanced Standing; (2) such work may not be offered by students whose general scholarship record is unsatisfactory, or for covering deficiencies due to poor scholarship; (3) not more than forty-five units may be credited toward graduation for such special courses.

Ordinarily the last quarter's work of every candidate for a degree must be taken in this University; but in special cases, students who have obtained at least one hundred and thirty-five units in resident work, and who have completed all major department requirements, may be exempted from this regulation and permitted to complete the required number of units under the provisions noted above.

ADVANCED CREDIT

A student from an institution of equivalent rank may expect to receive the same standing relative to graduation as at the former institution, but not to exceed three years' advanced credit (one hundred and thirty-five unit hours toward graduation), and not without consideration of differences in the standard of entrance preparation and degree requirements. Every candidate must present a complete certified transcript of his college record, including entrance credit, and a letter of honorable dismissal.

Credits from recognized junior colleges are evaluated in terms of the amount of work completed, and the extent to which standard Lower Division requirements have been fulfilled. The maximum allowance for work in junior colleges is two years of university credit (ninety quarter units). Records involving work both in junior colleges and in accredited degree-granting institutions are given individual consideration and adjustment.

Recommended graduates of approved State Normal Schools, where the normal training has been preceded by a full four-year high-school course, or where high-school and normal-school courses together cover six years of work, may ordinarily be granted advanced credit of sixty-seven units. In the case of students from teachers' colleges which offer more than the two-year normal training, or which include junior college curricula, additional credit may be allowed if justified by the nature and amount of work completed.

In general, advanced standing for work done before matriculation will be given only when certified as having been completed in some institution of recognized collegiate rank, except as provided above for extra entrance units, or, in particular cases, to recommended graduates of approved State Normal Schools. But in special cases permission may be given by the Faculty to receive credit on examination for work equivalent to regular university courses. Application for such examinations, with satisfactory evidence of the work accomplished, must be presented to the Committee on Advanced Standing. Applications for advanced standing on the basis of work done before entering the University must be made within two years after matriculation.

LEAVE OF ABSENCE

A student desiring to leave the University for a brief time should apply to the Committee on Registration. If leave of absence is desired on account of sickness, the petition must be indorsed by the medical adviser. During the last four weeks of the quarter, no petition will be granted except upon approval of the Committee on Scholarship. A leave of absence is merely a jus-

tification of the absence and not a relief from the work that has been missed, and is usually necessary only in case of interrupted work; a student in good standing absent one or more quarters may re-enter at the beginning of any quarter without formal petition.

HONORABLE DISMISSAL

An honorable dismissal means that the student is permitted voluntarily to withdraw from the University and is commended to the favorable consideration of any institution he may wish to enter. An honorable dismissal does not carry any implication as to scholarship and may be granted upon written application to any student not under discipline for misconduct.

CONDUCT OF STUDENTS

The Committee on Student Affairs exercises the authority of the University over all students individually with respect to personal conduct, and, with the exception of athletic and debating teams, over student organizations which bear the name of the University, or which represent the University in non-academic activities, and, in general, assumes such measure of authority over non-academic organizations of students as may be needful to safeguard the general good name and well-being of the University community.

Individual or collective student enterprises which involve the absence of the participants from the University, while using the University name must receive the official sanction of the Faculty Committee concerned.

In the government of the University the largest liberty consistent with good work and good order is allowed. Students are expected to show both within and without the University such respect for order, morality, personal honor, and the rights of others as is demanded of good citizens. Failure to do this will be sufficient cause for removal from the University.

In 1908 the Board of Trustees of the University provided that in all future rentals or leases of houses as fraternity chapter houses it shall be expressly stipulated that no intoxicating liquors of whatever kind shall ever be sold or used on the premises. The Trustees also by formal resolution requested the Academic Council to prohibit the use of liquor in fraternity chapter houses, student clubhouses, and other student lodgings.

This action of the Board of Trustees is in harmony with the instructions given by the Academic Council to its Committee on Student Affairs, and defines the policy of the University. Prohibition of the use of liquor extends to all student lodgings whether on the campus or elsewhere, and the University assumes that the act of registering as a student implies full acceptance of this policy.

STUDENT CONTROL

In 1911–12 the Faculty Committee on Student Affairs and the University Conferences entered into an agreement by which responsibility for the government of the students and for maintaining University standards was assumed by the men and women of the University. Since then the women have continuously discharged their responsibility, and the making and enforcing of the social regulations which govern women students are in their hands. The delegation of responsibility, temporarily recalled, for men, in 1918, was resumed in 1919–20, under an agreement between the President and the men of the University. The Men's Student Council is responsible for the

enforcement of University rules governing conduct of men students, and all actions of the Council are submitted directly to the President for sanction or disapproval.

HONOR SYSTEM

In 1921 the Honor System was established by the Academic Council of the University. Under this system, responsibility for honesty in the conduct of examinations rests (1) with each individual student, who is pledged not to receive or give aid in examinations, (2) with the major students of each department, whose duty it is to conserve and strengthen the system within the departments, and (3) with the Student Councils, who have general supervisory control and the power to adopt regulations and deal with infractions of the system in the same manner as other cases of discipline.

UNIVERSITY HEALTH CONTROL

University Health Service.—The public health of the University community is safeguarded by the Committee on Public Health, the chairman of which is the University Health Officer, who is also a deputy county health officer. Regular inspections are made of premises, food supplies, and the handling of foods. Bacteriological examinations are made regularly of water supplies and swimming pools, and of samples of milk from all dairies that supply the community. Arrangements have been made with the Palo Alto Hospital for the care of students with non-contagious diseases. An Isolation Hospital on University property is available for contagious cases.

Vaccination.—Not later than four weeks after the day of registration every student must file with the Committee on Public Health a certificate, signed by the vaccinator, who must be a duly licensed and practicing physician, giving exact dates of vaccination, and showing acceptable vaccination within seven years.

Non-compliance with these requirements will result in a fine of two dollars after four weeks, and cancellation of registration after five weeks from the day of registration.

Certificates are to be filed at the Registrar's office. They will be returned upon request. "Conscientious objections" will not be recognized as exempting anyone. Unavoidable delay, or failure to secure a satisfactory certificate, will not exempt anyone from the fine.

(It is advised that candidates comply with this requirement before coming to the University, and that vaccination certificates be sent in advance by mail. Blank certificate forms may be obtained on application to the Secretary of the Public Health Committee, at the Registrar's office.)

Student Health Service

The University maintains a health service for men and a health service for women.

The Health Service for Men.—(See also *Announcement of School of Hygiene and Physical Education for Men.*) A health examination is required of all men students prior to the completion of matriculation. This first examination is in two parts. One is a rapid, thorough examination that is mainly physical, given before the student enrolls in his classes. The other is a leisurely conference with such additional procedures as may be necessary to complete the examination, during the first quarter of the stu-

dent's attendance. Subsequently, required health examinations are repeated annually. Men who are found in such condition that they probably will be unable to carry the normal student program without health injury to themselves, or who are a menace to the health of their fellow-students, are denied matriculation or continued registration in the University.

All men planning to participate in athletics are required each season to pass satisfactorily a health examination before going into active training.

Important health advice is followed up in later required conferences in order to learn the use the student has made of the advice given. Those who fail to take reasonable care of incapacitating defects, or who expose others to health injury because of their lack of self-care, are not permitted to remain in the University.

Voluntary Consultations.—Hours are scheduled every day, Saturday and Sunday included, in the offices of the Student Health Service for men who desire help in the solution of their problems of physical, emotional, or social health.

Medical Treatment.—The University does not enter upon the treatment of its students. Sick students should call at, or telephone to, the offices of the Student Health Service for help in securing the service of the private physicians or surgeons of their choice.

Emergency treatment may be given in the offices of the Student Health Service, safeguarding the student until the arrival of his own physician. The functions of this service are educational and advisory. Occasional minor services are rendered but every student is expected to have his own private physician on whom he should call in case of illness.

The staff of the Student Health Service is maintained in order that students may receive information and advice that will help them understand and take intelligent care of their health problems. The examinations are as thorough as possible. Consultation with experienced outside specialists, X-ray examinations, and laboratory tests may be secured without expense to the student in case the staff examiner finds such additional information necessary to his solution of a health problem.

Athletic Injuries.—Students training for, or participating in, athletic competition do so voluntarily and assume the risks incident thereto. Neither the University nor the Board of Athletic Control (which is a part of the University) has any legal responsibility or obligation to meet the expense of caring for injuries sustained by students because of athletic training or competition. Neither the University nor the Board of Athletic Control assumes such responsibility for students who enter into such training or competition. Nevertheless, the policy of the Board of Athletic Control is to pay, within reasonable limitations determined by it, the expense of the treatment of injuries received by athletes while training for or participating in intercollegiate sport, provided the injured athlete first secures the authorization of the Medical Adviser in charge of athletes, and subject at all times to the right to decline to give such aid or to discontinue further aid, when it is being given. Financial aid will not be given in case the injury is a result of the carelessness of the injured man. For instance, no such help will be given to the man who, having an old sinus trouble, goes on the swimming or water-polo squad and thus exposes himself to an almost inevitable return of sinus trouble; the athlete who neglects official directions to wear ankle straps or other safeguards should not expect to escape paying for his own carelessness in case of consequent injury; the athlete who fails to wear clean

clothing and thereby becomes infected cannot expect the Board of Athletic Control to pay any medical or surgical bills that may be consequent to his carelessness.

The Health Service for Women.—A similar health service under the direction of the Medical Adviser of Women is especially adapted to the needs of the women students.

Students' Hospital Fund

The Students' Hospital Fund is financed by the payment of $5 per quarter by each student as part of the Community Fee. This fund provides financial assistance to students needing medical treatment at the Palo Alto Hospital, at the Stanford University Hospital in San Francisco, or at the Isolation Hospital located on University property. Charges for calls at a doctor's office, or for visits by a doctor to a patient's home, must be paid by the student, but service charges for students properly admitted to the hospitals named will be paid from the Students' Hospital Fund in accordance with the following regulations:

1. Students will be allowed four dollars a day toward the regular hospital fee for the first seven days, and two dollars a day after the first seven days for a total of not more than thirty days. Allowances for longer stays will be determined by the Committee.
2. Of the total bill presented by a physician, the Students' Hospital Fund will pay not to exceed $15 for the first week, and not more than $1.50 toward the cost of a visit.
3. Twenty-five per cent of the charge for an emergency operation, this amount not to exceed $25.
4. X-ray and laboratory fees, charges for the use of the operating room and for anaesthetics, and charges for the application of casts.

The foregoing charges are paid only in the event of a student's being admitted to a hospital on the order of the Medical Adviser of Men, the Medical Adviser of Women, or of one of the local physicians.

The University cannot advise students in regard to the choice of physician.

DEGREES AND TEACHING CREDENTIALS

DEGREES

Candidates may be presented for graduation in January, April, June, and October.

No degree will be conferred upon any person who has not spent at least three quarters in resident study at the University. No honorary degrees are given.

LOWER DIVISION REQUIREMENTS

The Lower Division consists of the first and second years of the University curriculum. Its object is to introduce the student to fundamental fields of human interest, and to this end it requires the completion of certain studies during the first two years. To the students enrolled in the Lower Division the members of the Committee on Lower Division Administration stand in the same relation as that occupied by departmental advisers toward their major students.

Under the supervision of the Committee on Lower Division Administration, the work of the first two years is divided into three groups. Every student is required to take at least *nine units* in each of these groups each year. The requirements are as follows:

Group I.—Language and literature (English and foreign). Formative art (including graphic art and drawing courses in the Engineering Departments).

a) Fifteen units (two high-school years) of each of two foreign languages, or twenty-two units (three high-school years) of one foreign language. (If this amount has been done in high school, the Lower Division does not require additional work.)

b) English A during the first year, provided the student has failed to pass the matriculation test in English.

c) Six units of English composition (English 2*a* and 2*b*) during the second year.

d) Electives to make up the required total of eighteen units (nine units each year) of languages and literature, if the above requirements have not totaled that amount.

Group II.—Natural sciences, mathematics (applied mathematics, biology, botany, chemistry, engineering, geology, logic, mathematics, military science, mining and metallurgy, physics, psychology, zoölogy, and entomology.)

a) Nine units of biological science, physics, or chemistry during the first year.

(1) Biological science for those who have completed a high-school year of physics or chemistry only.

(2) Physics or chemistry for those who have completed a high-school year of biological science only.

(3) Biological science and physics or chemistry (a total of eighteen units) for those who have completed neither a biological science nor a physical science in high school.

b) Electives to make up the total of eighteen units (nine units each year) in the group.

Group III.—Social sciences (history, political science, economics, philosophy, and education.)

a) Twelve units of citizenship in the first year.

b) Nine units of history in the second year.

(1) Any history course numbered under 50 for those who have had both American and general history in high school.

(2) American history (21, 22, 23) for those who have had only general history in high school.

(3) General history (10, 11, and 12, or 16 and 17) for those who have had only American history in high school.

(4) Both general and American history (a total of eighteen units) for those who have had neither in high school.

Students transferring from other institutions with advanced standing will be relieved from such of the requirements of the Lower Division as, in the judgment of the Committee on Lower Division Administration, they have substantially completed elsewhere. Such students should consult the Lower Division Office.

The requirements of the Lower Division may be anticipated to some extent by the proper choice of subjects presented for entrance credit. These may well include: three units in one foreign language or two units in each of two foreign languages, one unit in a biological science, one unit in physics or chemistry, and two units in history. Of the latter, one unit should be in United States history and one unit in Ancient, European, or English history. This is especially to be recommended when an engineering course has been definitely chosen, in which case trigonometry should also be included.

Most of the science departments in the University, including the School of Medicine, require a reading knowledge of French or German for graduation, and German is required for all advanced degrees in the Chemistry Department. It is advantageous to begin these languages before matriculation.

All undergraduates enrolled in the Lower Division, with the exception of those registered in the Military Department, are required to devote to physical training three schedule hours per week, for a maximum of six quarters.

MAJOR SUBJECT

The selection of a major subject will be made ordinarily at the end of the second year, upon completion of the requirements of the Lower Division. The Lower Division student may, however, at the beginning of any quarter, designate the particular department in which he expects later to do his major work, and will then be directed to the department for consultation and advice regarding electives before making up his study-list.

At the beginning of the junior year, and upon completion of the Lower Division requirements, the student selects as a major subject the work of some one department. The major department has the authority to prescribe not more than sixty units in the major subject (exclusive of elementary courses in the major department which may be offered for entrance). The major department shall also recommend such other courses as may be considered desirable, and shall exercise an advisory supervision over the student's curriculum from quarter to quarter. It shall be considered a general principle of University policy, to be departed from only in excep-

tional cases, that at least ninety of the one hundred and eighty units required for the degree be taken outside of the major department.

In applied science the major department may prescribe as much of the entire one hundred and eighty units as it shall deem essential to the technical or professional requirements of the major subject.

Within these limitations the work in all departments is elective, and the student may freely choose any course which his previous studies have prepared him to undertake.

(A student in regular undergraduate standing who does not intend to become a candidate for the degree of Bachelor of Arts, may choose, with the approval of the Lower Division Committee, or of the Major Department, any course in the University which his previous training has prepared him to undertake.)

BACHELOR OF ARTS

The degree of Bachelor of Arts (A.B.) is conferred upon candidates who have fulfilled the following requirements:

1. The completion of one hundred and eighty (quarter) units of university work, including the required Lower Division courses, together with the required physical or military training. (A special student who has completed two hundred and twenty-five units of university work, including all Lower Division and major requirements, and whose general university record is deemed proof of superior scholarship, may become a candidate for graduation on approval of the Committee on Admission and Advanced Standing; but ordinarily petitions to this end will not be considered by the Committee until after the student has completed one hundred and eighty units of university work.)

2. The acquirement of as many grade points as there are units registered on the candidate's record card.

3. The completion of the major subject requirements as prescribed by the major department.

The recommendation of the major department is necessary to graduation.

Forty-five units constitute a normal year's work (see p. 142); but the ordinary class divisions (freshman, sophomore, junior, senior) are not recognized by the University. The degree is conferred whenever the requirements are met, without regard to the time spent, except that at least forty-five units (including, except in special cases, the last fifteen) must be completed in this University.

If graduates of other universities desire to become candidates for the baccalaureate degree, the question of units required for graduation may be waived, upon approval of the Committee on Admission and Advanced Standing, and the degree conferred on the satisfactory completion of not less than forty-five units of university work and the fulfillment of all major and minor requirements.

As a recognition of high scholastic attainment the Bachelor's degree may be granted "with distinction" or "with great distinction."

MASTER OF ARTS

The degree of Master of Arts (A.M.) is conferred on recommendation to the Academic Council by the Committee on Graduate Study, upon the satisfactory completion of one academic year of graduate work at this University,

the presentation of an approved thesis, and the passing of such general or final examinations as may be set by the school or department.

For admission to candidacy a Bachelor's degree from this University, or evidence of equivalent training, is required. In no case will the degree be granted unless the student has been registered for three quarters after completing the requirements for the Bachelor's degree. A longer period of residence will be necessary for students who are inadequately prepared or who devote less than the normal amount of time to their studies.

Admission to candidacy is granted by the Committee on Graduate Study on the basis of an application, approved in writing by the school or department in which the candidate proposes to take the degree, and filed with the Registrar not later than the fourth week of the second quarter of residence. This application should include the subject of the proposed thesis and a program of study approved by the school or department. Applications once submitted must be kept on file and may not be withdrawn even if substitutes are filed and accepted. At least two-thirds of a year's work must be devoted to advanced or graduate study in the major subject or in closely allied subjects. Work may be done in connection with regular courses, or, as research, independently of them.

A thesis presented for the degree of Master of Arts should show that the candidate has ability to do independent thinking. A copy of the thesis, bearing the approval of the instructor under whose supervision it was prepared, must be submitted to the Committee on Graduate Study by the date on which instruction closes for the quarter in which the degree is to be conferred. This copy shall be the original, not a carbon copy, typed on paper of standard size and weight, with a title page of the form prescribed by the Committee, and suitably bound. The thesis upon acceptance will be placed in the University Library.

MASTER OF BUSINESS ADMINISTRATION

The degree of Master of Business Administration will be conferred, upon the recommendation of the Committee on Graduate Study, when the student has satisfied the requirements laid down by the faculty of the Graduate School of Business.

ENGINEER

The degree of Engineer* in Civil, Electrical, Mechanical, Mining, or Metallurgical Engineering is conferred on recommendation of the Committee on Graduate Study, upon the satisfactory completion of two† academic years of graduate work in residence at this University, the presentation of an approved thesis, and the passing of such general or final examinations as may be set by the school or department.

For admission to candidacy a Bachelor's degree from this University, or evidence of equivalent training, is required. A longer period of residence will be necessary for candidates who are inadequately prepared or who

* For the degree of Engineer in Engineering Chemistry see the Announcement of the Department of Chemistry.

† Prior to October 1, 1929, any Engineering Department may enroll students in the fifth year of a five-year course leading to the degree of Engineer, provided that any student so enrolled is either:

a) a graduate of the Department with the degree of Bachelor of Arts, or

b) a graduate of this or another university who has covered a substantial equivalent of such degree.

devote less than the normal proportion of time to their studies. The residence requirement may be waived in part in exceptional cases upon recommendation of the department to the school and with the approval of the Committee on Graduate Study.

Admission to candidacy is granted by the Committee on Graduate Study on the basis of an application, which must be filed with the Registrar not later than the fourth week of the second quarter of residence. This application should include the subject of the proposed thesis and a program of study approved by the department and the school, and must be accompanied by the formal approval in writing of the department to the school. Applications once submitted must be kept on file, and may not be withdrawn even if substitutes are filed and accepted.

At least sixty units of the six quarters' work must be devoted to advanced or graduate study in the major subject or in intimately allied subjects. Work may be done in connection with regular courses, or as research independently of them.

A thesis presented for the degree of Engineer should show that the candidate has ability to do independent thinking. A copy of the thesis, bearing the approval of the instructor under whose supervision it was prepared, must be submitted to the Committee on Graduate Study by the date on which instruction closes for the quarter in which the degree is to be conferred. This copy shall be the original, not a carbon copy, typed on paper of standard size and weight, with a title page of the form prescribed by the Committee on Graduate Study, and suitably bound. The thesis upon acceptance will be placed in the University Library.

DOCTOR OF EDUCATION

The degree of Doctor of Education (Ed.D.) is conferred upon recommendation of the Faculty of the School of Education and the Committee on Graduate Study, on students who complete, in a satisfactory manner, the program of advanced study in Education as prescribed by the Faculty of the School of Education, submit a satisfactory thesis, and give evidence as to broad and substantial scholarship in the selected fields. This degree is of two types: (*A*) the Administrator type, and (*B*) the Master-Teacher type. The minimum time requirement is the same for each type, and the general requirements for either type of degree are intended to be substantially as difficult as those for the Ph.D. degree, but somewhat different in type. A description of each type of the Ed.D. degree is given in this bulletin under the School of Education.

BACHELOR OF LAWS

The degree of Bachelor of Laws (LL.B.) is conferred upon students who have received the degree of Bachelor of Arts, or its equivalent, from this University or from some other institution of recognized collegiate rank, and who have thereafter satisfactorily completed courses in Law aggregating 117 units, including therein all first-year professional courses, and who have devoted nine full quarters of time to the study of Law and have otherwise satisfied the requirements of the University and of the School of Law.

JURIS DOCTOR

To be admitted to candidacy for the degree of Juris Doctor a student must be eligible for admission to the School of Law in regular standing, must

have completed the work for the first degree in law at this University, or in some other university law school of recognized standing in which work for the first degree in law covers a period of not less than six years of combined academic and law work, and must be approved for candidacy by action of the Law Faculty. For this purpose there must be furnished a complete and official transcript of the academic and professional work of the applicant, showing in detail courses pursued, grades received, and the degrees conferred. This transcript should be sent by the proper official directly to the Dean of the School of Law. Students who have met the foregoing requirements and who have completed with a high average and otherwise to the satisfaction of the Law Faculty thirty-two units of work in law courses not previously taken, including therein at least eight units to be selected from courses numbered 280 to 286, as set forth in the announcement of the School of Law, and who have in addition submitted an acceptable thesis on a legal problem approved by the Faculty, will be granted the degree of Juris Doctor (J.D.).

DOCTOR OF MEDICINE

The degree of Doctor of Medicine (M.D.) is conferred upon recommendation of the Committee on Graduate Study, on students who complete the five years' curriculum in Medicine (which includes the interne year), based upon the three years' pre-medical course as laid down by the University.

DOCTOR OF PHILOSOPHY

General Regulations.—The degree of Doctor of Philosophy (Ph.D.) is conferred on recommendation to the Academic Council by the Committee on Graduate Study, upon evidence of substantial scholarship, high attainment in a particular field of knowledge, and ability to do independent investigation and present the results of such research. For admission to candidacy, a Bachelor's degree from this University, or evidence of equivalent training, is required. After admission to candidacy each candidate must satisfy the foreign-language requirement, pass an oral examination, present an acceptable dissertation, and, in certain cases, pass a second oral examination, before the Committee on Graduate Study will recommend the candidate for the degree. A minimum of three years (nine quarters) of graduate study satisfactorily completed is required of candidates; at least one of these years, ordinarily the last, must be spent as a resident student at Stanford University.

All applications or petitions to the Committee on Graduate Study must be submitted to the school or department concerned for approval before being filed with the Registrar. Communications should be addressed to the Dean of Graduate Study, Registrar's Office, Stanford University, California.

Admission to Candidacy.—Admission to candidacy is granted by the Committee on Graduate Study on the basis of an application approved in writing by the school or department in which the candidate proposes to take the degree. Each prospective candidate should consult the executive head of the school or department concerned, and such other faculty members as he may choose, in regard to his qualifications and program of study. Application for candidacy should be made on a blank obtained at the Registrar's Office and filed with the Registrar, ordinarily during the second year of graduate study, or not later than the fourth week of the last academic year of candidacy. Applications once submitted must be kept on file and may not be withdrawn

even if substitutes are filed and accepted. The application should name a major subject and one or two minor subjects, and should contain a program of study and state the subject of the dissertation. Approximately two-thirds of the proposed program of study should be devoted to the major, but in exceptional cases one or both minors may be waived by the Committee on Graduate Study, upon recommendation of the school or department concerned.

Foreign Language Requirement.—One week before the oral examination the school or department in which the candidate proposes to take the degree must certify in writing to the Committee on Graduate Study that he possesses a reading knowledge of French and German. In special cases, with the approval of the school or department and the Committee on Graduate Study, another foreign language may be substituted for French or German, when such substitution is justified by the literature of the candidate's field of study.

Oral Examination.—When a candidate has shown special ability in his field of study and has proved his capacity for independent investigation, to the satisfaction of the school or department concerned, he may arrange through the Dean of Graduate Study for an oral examination. The purpose of the examination is to test the candidate's command of his major and minor fields and to confirm his fitness for scholarly pursuits. This examination shall be held not later than the eighth week of the last (academic) year of candidacy and should be about three hours in length. The examining committee shall include (1) the Dean of Graduate Study or his delegate presiding, (2) the professors in the school in which the major subject lies, (3) the professor or professors in charge of the minor subject or subjects if lying in another school. The schools are Biology, Engineering, Letters, Social Sciences, and Physical Sciences. The Department of Philosophy, the School of Education, the Food Research Institute, or the Graduate School of Business may for this purpose be designated by the Dean of Graduate Study as a temporary member of any of the schools. Any member of the Academic Council may attend and take part in the examination. The candidate may be recommended to the Committee on Graduate Study for final acceptance only upon the favorable vote of three-fourths of the members of the Academic Council present and voting.

Dissertation.—Recommendation for the degree shall be made only after the acceptance of a dissertation, which must be a contribution to knowledge and the result of independent work, expressed in satisfactory form. At least four weeks before the last day of instruction in the quarter in which the degree is to be conferred, the candidate must deposit at the Registrar's Office (1) three typewritten or printed copies of the dissertation, (2) an abstract of its contents, and (3) a brief biography, all approved by the school or department. Upon the deposit of the dissertation, the Dean of Graduate Study shall appoint a special committee of three whose duty it shall be to read the dissertation, conferring with the candidate if it so desires, and to report to the Dean of Graduate Study whether or not in its opinion the dissertation is of a scope and quality acceptable in fulfillment of this requirement for the degree.

The special committee on the dissertation may at its discretion accompany its report with a recommendation that the candidate be required to pass a second oral examination of specified scope. This examination shall be given by a committee consisting of the Dean of Graduate Study, or his delegate

presiding, a professor selected by the school or by each of the major and minor departments, and additional members to a total of five, appointed by the Dean of Graduate Study. A majority vote shall be necessary for recommending the candidate to the Committee on Graduate Study for the degree.

Dissertation, Biography, Abstract, and Deposit.—Directions regarding the form of the dissertation, title-page, bibliography, abstract, and biography may be obtained at the Registrar's Office. After its final acceptance, the Registrar shall order the three copies of the dissertation bound at the expense of the candidate. Two of these copies shall be made available for loan from the University Library. The abstract, 500 to 2,000 words in length, will form a part of a volume issued annually by the University. Each candidate shall make a deposit (approximately $35) at the Comptroller's Office, on or before the last day of instruction in the last quarter of candidacy, to cover the cost of binding his dissertation and his share of the cost of publishing the volume of abstracts.

ADVANCED DEGREES IN THE SCHOOL OF MEDICINE

The departments of the School of Medicine are considered as equivalent to other departments of the University in respect to candidacy and requirements for the degrees of Master of Arts and Doctor of Philosophy, and all the foregoing regulations apply to these departments and department faculties as to departments and department faculties at the University, with the following modifications and limitations:

1. Candidates for these degrees must have received the degree of Bachelor of Arts at Stanford, or an equivalent training elsewhere, and must have the approval of the department faculty in which the degree is sought. The degree of Doctor of Medicine will ordinarily be required as a prerequisite for those wishing to do clinical work.

2. Time spent in candidacy for the degree of Master of Arts or Doctor of Philosophy will not be counted toward the degree of Doctor of Medicine.

TEACHING CREDENTIALS*

This University acts as agent for the State Board of Education of California in the matter of credentials for teaching, and also recommends to the proper educational authorities in other states, as is indicated in the pages which follow.

All students who intend to prepare for teaching are urged to confer with the Secretary of the School of Education at the beginning of their junior year regarding lines of preparation, desirable combinations, requirements, and similar matters, so that the most advantageous grouping of courses and the most economical arrangements of work and time may be made.

As a physical and mental health certificate of an applicant is now required from the University authorities by the state, all students who intend to prepare for teaching are also urged to confer, early in their course, with the Medical Adviser of Women, Dr. Clelia Duel Mosher, or the Medical Adviser of Men, Dr. Thomas A. Storey. All prospective candidates for credentials will then be advised regarding physical and mental conditions which might later, if uncorrected, prevent the granting of the teaching credential.

* For the latest certification requirements of the California State Board of Education, see the *Announcement of the School of Education*, 1929–30.

Teachers' certificates are issued by County, and City and County Boards of Education under the provisions of Section 1519, subdivision 5 (*a*), Section 1775, subdivision 1 (*a*), and Section 1792 of the Political Code of California. The State Board of Education of California, in accordance with the law, is empowered to issue teaching credentials, valid throughout the state, upon which County, and City and County Boards of Education may in turn issue certificates. This University, through its School of Education, has been empowered to grant credentials to students who meet requirements laid down by the State Board of Education, of nine grades: (I) Elementary, (II) Junior High School, (III) Secondary, (IV) Junior College, (V) Special, (VI) School Administration, (VII) School Supervision, (VIII) Educational Research, and (IX) Preliminary Credentials, the last being valid only for cadet teaching in connection with Education 202.

The School of Education has ruled that all work done in graduate standing must be of C grade or above, to be counted for credential requirements.

Certificates are granted on the basis of the School of Education Credentials, after these have been countersigned by the proper state authority, and are valid for teaching as described below. California credentials may be obtained under the following conditions:

I. THE ELEMENTARY SCHOOL CREDENTIAL

(Valid for teaching in the elementary schools of the state.)

An applicant for the Elementary School Credential must present the following:

1. A Bachelor's degree from this University.
2. A certificate that the applicant is physically and mentally fit to teach.
3. Completion of 36 quarter units of work in Education, including:
   - *a*) Introduction to the Study of Education, 5 units (Course 130)
   - *b*) Methods and Management of Instruction, 2 units (Course 201)
   - *c*) Practice Teaching, 6 units (Course 202)
   - *d*) Principles of Elementary Education, 3 units (Course 193)
   - *e*) Other elective courses to complete the requirement
4. A course in the Constitution of the United States (History 175, or an acceptable substitute). This requirement may be covered by taking the examination given by the county superintendents throughout the state.

[Stanford University does not prepare for the Elementary Credential.]

II. THE JUNIOR HIGH SCHOOL CREDENTIAL

(Valid for teaching in any junior high school.)

An applicant for a Junior High School Credential must present the following:

1. A Bachelor's degree from this University.
2. A certificate that the applicant is physically and mentally fit to teach.
3. Completion of 27 quarter units of work in Education, including:
   - *a*) Introduction to the Study of Education, 5 units (Course 130)
   - *b*) Methods and Management of Instruction, 2 units (Course 201)
   - *c*) Practice Teaching, 6 units (Course 202)
   - *d*) Principles of Secondary Education, 3 units (Course 195)
   - *e*) Teachers' Courses in both the major and minor subjects, if given in the University
   - *f*) Other elective courses to complete the required number of units

It is highly desirable that the requirements for the Elementary Credential be completed by every candidate for the Junior High School Credential, that the credential may read "including Elementary," so that the candidate may teach in the elementary grades as well.

4. Completion of the required work in at least one Teaching-Major and one Teaching-Minor, in subjects taught in high schools. If the Major subject is in a field not commonly accepted for high school graduation, such as Philosophy, Education, Psychology, etc., two Minors will be required.
5. A course in the Constitution of the United States (History 175, 3 units, or an acceptable substitute). This requirement may be covered by taking the examination given by the county superintendents throughout the state.

[California teachers in service who have had at least two years of successful experience in teaching grammar grades, and who have completed 3½ years of collegiate work in advance of a four-year high school course, including 27 quarter units of prescribed work in the Division of Education may be granted the Junior High School Credential until September 15, 1930.]

III. THE SECONDARY SCHOOL CREDENTIAL

(Valid for teaching in any high school in the state; and, if the holder has secured the A.M., Ph.D., or Ed.D. degrees, in the junior college.)

In all cases the candidates must hold a Bachelor's degree from some institution requiring eight years of high school and college work for such degree; must satisfactorily complete the required work in at least one Teaching-Major and one Teaching-Minor, with the exception that where the Major is in Education or Psychology, or in any field not commonly accepted for high school graduation, two Minors will be required; and in addition must complete in this University a full year of graduate study.

The School of Education has ruled that all work done in graduate standing must be of C grade or above, to be counted for the credential.

An applicant for a Secondary Credential must present the following:

1. A certificate that the applicant is physically and mentally fit to teach.
2. A course in the Constitution of the United States (History 175, or acceptable substitute). This requirement may be covered by taking the examination given by the county superintendents throughout the state.
3. A Bachelor's degree from some institution requiring eight years of high school and college work to secure the degree.
4. One full year of graduate work of not less than 39 quarter units of Upper Division or graduate courses, in an institution, or institutions, approved for graduate work by the State Department of Education. The School of Education of Stanford University expects all candidates to put in at least three quarters of work in the University in order to secure the credential. This graduate work must include at least nine quarter units in the candidate's teaching subjects, and at least nine quarter units in Education courses.
5. A minimum of 27 quarter units in Education courses, including:
   - *a*) Introduction to the Study of Education, 5 units (Course 130)
   - *b*) Principles of Secondary Education, 3 units (Course 195)
   - *c*) Methods and Management, 2 units (Course 201)
   - *d*) Practice Teaching, 6 units (Course 202). This may be waived in the case of candidates who have had one or more years of successful teaching experience
   - *e*) Teachers' Courses in both Major and Minor subjects, if given in the University

6. Completion of the required work in at least one Teaching-Major and one Teaching-Minor, in subjects taught in high schools. If the major subject is in a field not commonly accepted for high school graduation, such as Philosophy, Education, Psychology, etc., two Minors will be required.

Candidates who have taught or been engaged in school supervision in this or any other state, and who present credentials showing that they have done so for at least nine months with reasonable success, may be excused from 6 of the 27 units of Education represented by Practice Teaching (Education 202). All students desiring such exemption must make application on Form B, to be obtained at the Office of the Secretary of the School of Education, Room 52.

IV. THE JUNIOR COLLEGE CREDENTIAL

(Valid for teaching in the two years of the junior college.)

An applicant for the Junior College Credential must present the following:

1. A certificate that the applicant is physically and mentally fit to teach.
2. A course in the Constitution of the United States (History 175, or acceptable substitute). This requirement may be covered by taking the examination given by the county superintendents throughout the state.
3. A Master's or Doctor's degree granted by the recommending institution or other institution approved by the State Board of Education. One year of graduate work must have been done in the recommending institution.
4. Two Teaching-Majors, or one Major and two Minors.
5. At least 15 quarter units of work in Education including:
   - *a*) Principles of Junior College Education, 3 units (Course 285). In certain cases, Principles of Secondary Education may be substituted.
   - *b*) Methods and Management, 2 units (Course 201)
   - *c*) Practice Teaching, 6 units (Course 202). This may be waived in the case of candidates who have had one or more years of successful teaching experience

V. SPECIAL SECONDARY CREDENTIALS

(Valid for teaching the subject, or subjects, named upon the credential in the schools of California.)

Special Secondary Credentials are granted in the fields of Art; Commerce; Health and Development; Home-making; Industrial Education; Library Craft; Music, Band, Orchestra, or Chorus; Physical Education; Speech Arts; Vocational Education, Trade and Industrial Education, Agricultural Education.

The School of Education at Stanford University at present can prepare candidates only for the Special Credentials in Art, in Physical Education for Men, and in Speech Arts. Candidates interested in the other fields must secure proper preparation from some other accredited teacher-training institution.

[Applicants for Special Credentials in the fields listed above may secure additional information from the Secretary of the School of Education as to requirements in each field, other than Art, Physical Education for Men, or Speech Arts, described below.]

An applicant for a Special Credential must present the following:

1. A certificate that the candidate is physically and mentally fit to teach.

2. Completion of a four-year college course with a Bachelor's degree, including a minimum of 24 units of academic work, 36 to 75 units of training in the field listed upon the credential, and 22½ units in Education courses.

(A) Special Secondary Credential in Art

An applicant for a Secondary Credential in Art must present the following:

1. A certificate that the candidate is physically and mentally fit to teach.
2. A Bachelor's degree from a teacher-training institution approved by the California State Department of Education for training art teachers.
3. A minimum of 24 quarter units of academic work.
4. A minimum of 22½ quarter units of professional work in Education, including:
   - *a*) Principles of Secondary Education, 3 units (Course 195)
   - *b*) Practice Teaching, 6 units (Course 202)
   - *c*) Methods and Management, 2 units (Course 201)
   - *d*) Teacher's Course in Art, 3 units (Course 206)
   - *e*) Introduction to the Study of Education, 5 units (Course 130)
5. A minimum of 75 quarter units of work in art, distributed approximately as follows:
   - *a*) History, theory, and appreciation of art.....15 units
     - Graphic Art 6. Lectures on Renaissance and Modern Painters
     - *Graphic Art 5. The Art of House Design
     - *Graphic Art 116. Interior Decoration
   - *b*) Representation .....15 units
     - Graphic Art 1. Still-life and Quad Sketching
     - Graphic Art 2. Free-hand Construction Drawing
     - Graphic Art 4. Perspective
     - Graphic Art 110. Illustration
   - *c*) Design .....15 units
     - Graphic Art 3. Design in Form and Color
     - Graphic Art 5. The Art of House Design
     - Graphic Art 116. Interior Decoration
   - *d*) Art Crafts .....6 units
     - Graphic Art 112. Textiles
     - Graphic Art Pottery
     - Graphic Art Metal Craft
   - *e*) Electives, in above, or in special fields of art, such as House Design and Civic Art, Posters and Lettering, and Costume .....24 units
   - Total .....75 units

[Note.—Art Supervisors must hold both the art credential and supervision credential.]

(B) Special Secondary Credential in Physical Education

Physical Education for Men.—An applicant for a Secondary Credential in Physical Education for Men must present the following:

1. A certificate that he is physically and mentally fit to teach.
2. A Bachelor's degree from a teacher-training institution approved by the California State Department of Education for training teachers of Physical Education.
3. A minimum of 24 quarter units of academic work.

* Courses both in art theory and in design.

4. A minimum of 22½ quarter units of professional work in Education, including:
   a) Principles of Secondary Education, 3 units (Course 195)
   b) Practice Teaching, 6 units (Course 202)
   c) Methods and Management, 2 units (Course 201)
   d) Methods courses in Physical Education (if given)
   e) Introduction to the Study of Education, 5 units (Course 130)
5. A minimum of 23 quarter units selected from at least four of the following:
   a) Biology (e.g., General Biology 1 and 2; Biology 150, Genetics; 160, Protoplasm; 161, Physiology of Growth in Plants; 163, Ecology: Environmental Relations.)
   b) Anatomy (Anatomy 103, Dissection of the Human Body; Zoölogy 2, Comparative Anatomy of Vertebrates; Zoölogy 108, Mammalian Anatomy.)
   c) Physiology (Physiology 101, Elementary; 102, Elementary; 103, Principles of Physiology; 104, Physiology of Maintenance; 105, Physiology of External Adjustment.)
   d) Hygiene (Physical Education and Hygiene, Courses 50, 51, 52, 150, and 151.)
   e) Sociology (Economics 2, Elementary Sociology; 112, Social Processes; 113, Social Evolution, Culture, and Progress; 114, Social Problems.)
6. A minimum of 36 quarter units selected from at least six of the following:
   a) History and Principles of Physical Education (Physical Education and Hygiene, Course 155)
   b) Technique of Teaching Activities (Physical Education and Hygiene, Courses 30, 70, 71, 72, 73, 130, 170, 171, 172, 173)
   c) Administration of Physical Education (Physical Education and Hygiene, Courses 160, 161, 162, 163, 165)
   d) Kinesiology (Applied Anatomy)
   e) Applied Physiology (Physiology of Exercise)
   f) Activities in Physical Education (Physical Education and Hygiene, Courses 1, 10–23, 40–45, 101, 110–123, 140–145)
   g) Community Recreation
   h) Individual program adaptations (Corrective Physical Education)
   i) Physical Education Tests and Measurements
   j) Health Education
   k) Growth and Development of the Child (Education 190)

[NOTE.—At least nine quarter units in activity must be chosen. An official record of the required work in Physical Education activities may count as part of the activity credit evaluated on the state's definition of a semester hour.]

(C) SPECIAL SECONDARY CREDENTIAL IN SPEECH ARTS

An applicant for a Secondary Credential in Speech Arts must present the following:

1. A certificate that he is physically and mentally fit to teach.
2. A Bachelor's degree from a teacher-training institution approved by the California State Department of Education for training teachers of Speech Arts.
3. A minimum of 24 quarter units of academic work, exclusive of courses in Education and Public Speaking.

4. A minimum of 22½ quarter units of professional work in Education, including:
   a) Principles of Secondary Education, 3 units (Course 195)
   b) Practice Teaching, 6 units (Course 202)
   c) Methods and Management, 2 units (Course 201)
   d) Methods course in Speech Arts, 2 units (Course 217)
   e) Introduction to the Study of Education, 5 units (Course 130)
5. A minimum of 60 quarter units of work in English and Public Speaking, distributed approximately as follows:
   a) Composition, 6 units
   b) Vocal Expression and Voice Training, 12 units
   c) Dramatics, 10 units
   d) Speech Making, Argumentation, and Debating, 14 units
   e) English Literature, 18 units

VI. THE SCHOOL ADMINISTRATION CREDENTIAL

The School Administration Credential will be granted to the holders of a valid California Teacher's Certificate, or a California Life Diploma, of elementary, junior high, or secondary grade, who have had at least 17 months of successful experience in teaching, and who, *in addition* to all requirements for a regular teacher's certificate, have completed 22½ quarter units of additional work in Education, as given in the specific requirements listed below.

The School Administration Certificate authorizes the holder to administer public education and to engage in such supervision as may be properly included in the duties of a superintendent, deputy superintendent, assistant superintendent, principal, general supervisor, or head of a department offering instruction in non-special subjects, such as English, Mathematics, Social Science, etc. Superintendents, deputy superintendents, assistant superintendents, principals of schools of more than five teachers (one of whom acts as principal), and vice-principals devoting full time to administrative duties will be required to hold the School Administration Certificate. The grade of the administration certificate is determined by the grade of teacher's certificate held, and since January 1, 1925, has been indicated on the credential. The grade of such credential may be raised without fee when the holder obtains a higher grade of general teacher's certificate.

Application for raising the grade of a School Administration Credential must be made to the State Commission on Credentials, accompanied by the administration credential and the teacher's certificate of higher grade.

The following courses have been prescribed by the State Board of Education as the ones that must be taken to meet the requirements for this credential. After the description of each course as prescribed, the course offered by this University that will satisfy the requirement is indicated.

1. At least 15 units to be selected from not less than four of the following courses (School Administration and Growth and Development of the Child required):
   a) A course in the History of Education in the United States, which will present the problems of present-day education in the light of their historical development. (Course 180, 3 units.)
   b) A course in Educational Tests and Measurements, which will show their use and give some training interpreting the results obtained. (Course 186E or S, 4 units.)

c) A course in School Administration, dealing with the broad fundamental principles underlying public school administration. (Course 250, 251, or 258, 4 units.)
d) A course in the Growth and Development of the Child. (Course 190, 3 units.)
e) A course in the Philosophy of Education. (Course 133 or 175, 4 or 5 units.)

2. At least 7½ additional quarter units, to be selected from the following courses:
a) Work of an Elementary-School Principal. (Course 254, 4 units.)
b) Administration of a High School, or of a Junior High School. (Course 230, 3 units.)
c) The Organization and Supervision of Elementary Education. (Course 256 or 262, 4 units.)
d) The Supervision of Instruction. (Course 223, 1 unit; 256, 4 units.)
e) Statistical Methods. (Course 185, 4 units.)
f) School Surveys. (Course 265, 4 units.)
g) Rural Education. (Course 174, 3 units.)
h) The Elementary School Curriculum. (Course 229 or 260, 3 units.)
i) The High School Curriculum. (Course 231, 5 units.)
j) State and County School Administration. (Course 250, 4 or 5 units.)
k) City School Administration. (Course 251, 4 units; 258, 4 units.)
l) School House Hygiene and Construction. (Course 269, 4 units.)
m) Methods in Mental Diagnosis. (Course 188, 5 units; 189, 4 units; 170, 3 units; 245, 4 units.)
n) The Organization or Administration of Vocational Education. (Course 234, 3 or 5 units.)

Under the rules of the State Board of Education, equivalents for any of the courses above, taken elsewhere, can be accepted only when they were completed in "a collegiate institution of standard grade."

[NOTE.—Persons now serving as administrators in schools of less than five teachers, or as supervisors giving less than half time to supervision will be permitted to substitute not less than six units of further work in administration and supervision subjects in lieu of actual experience for each long term renewal; with the understanding that as long as these administrators and supervisors serve in the same school system, and are unable to obtain the experience required by law for life diplomas, the credentials may be renewed from time to time for five-year periods, regardless of changed conditions for new credentials.]

VII. SCHOOL SUPERVISION CREDENTIAL

The School Supervision Certificate authorizes the holder to engage in school supervision, in accordance with the class of certificate held, viz.:

Class A. General Supervision, authorizing the supervision of all instruction within the grade of the Certificate.

Class B. Special Supervision, authorizing supervision in special field, such as music, art, physical education, etc.

Class C. Departmental Supervision, authorizing the supervision of departmental instruction in a junior college, high school, or junior high school.

Class D. Supervision of Attendance and Child Welfare, authorizing the holder to supervise attendance, take care of all attendance problems, serve as a co-ordinator between the school and home, and to adjust and administer social welfare.

Persons devoting at least half time to supervision will be required to hold the School Supervision Certificate. The grade of certificate is determined by the grade of teacher's certificate held in the subject or subjects to be supervised, and since January 1, 1925, has been indicated on the State Credential.

This credential will be granted to the holder of a valid California Teacher's Certificate, or a California Life Diploma, of any regular grade or special type, who has had at least 17 months of successful experience in teaching including the subjects he wishes to supervise; and who, *in addition* to all requirements for a regular or Special Teacher's Certificate, has completed school supervision subjects in accordance with the class specified.

The requirements for each class of supervision credential are as follows:

Class A—General Supervision

a) 15 quarter units selected from not less than four of the following courses (School Organization and Supervision, and Growth and Development of the Child required):

1. School Organization and Supervision. (Course 250, 251, or 256, 4 units.)
2. Growth and Development of the Child. (Course 190, 3 units.)
3. Philosophy of Education. (Course 133 or 175, 5 units.)
4. History of Education in the United States. (Course 180, 3 units.)
5. Educational Tests and Measurements. (Course 186E or S, 4 units.)
6. The Curriculum. (Course 229, 3 units; 231, 3 or 5 units; 260, 3 units.)

b) 7½ quarter units selected from the following group:

1. Rural Education. (Course 174, 3 units.)
2. Educational Sociology or Social Aspects of Education. (Course 175, 4 or 5 units.)
3. The Relation of Community Agencies to Public Education. (Course 300, 3 to 5 units.)
4. Problems of Supervision. (Course 256, 4 units; 262, 4 units.)
5. Modern Practice and Experiment in Education. (Course 229, 3 units.)
6. Methods in Mental Diagnosis. (Course 188, 5 units; 189, 4 units; 245, 4 units; 170, 3 units.)
7. Vocational Guidance. (Course 234, 3 or 5 units.)

[Note.—The candidate must also verify at least 9 quarter units in each of two subjects selected from the following: music, art, physical education, manual arts, commerce, homemaking subjects, and agriculture. These courses need not be in addition to courses presented for the teacher's certificate.]

Class B—Special Supervision

a) 6 quarter units of work selected from at least two of the following courses (Growth and Development of the Child required):

1. Growth and Development of the Child. (Course 190, 3 units.)
2. Philosophy of Education. (Course 133 or 175, 5 units.)
3. History of Education in the United States. (Course 180, 3 units.)
4. Social Value of the Special Field in which Supervision is to be done.

b) 9 quarter units of work selected from the following group (Organization, Objectives, and Supervision of Instruction in the Special Subject required):

1. Organization, Objectives, and Supervision of Instruction in Special Subject. (Special Teacher's Courses.)
2. Tests and Measurements in the Special Subject. (Course 186E or S, 4 units.)
3. Problems of Supervision. (Course 262, 4 units.)
4. Vocational Guidance. (Course 234, 3 or 5 units.)

Class C—Departmental Supervision

a) 7½ quarter units of work, including the following courses (Problems in the Organization and Supervision of a Department and Educational Measurements required):

1. Problems in the Organization and Supervision of a Department. (Course 254, 4 units.)
2. Organization and Supervision of Instruction. (Course 256 or 262, 4 units.)
3. Educational Measurements, including Tests in Special Field, if available. (Course 186E or S, 4 units.)

[Note.—Holders of Class "C" Departmental Supervision Credentials may be granted the School Administration Credential upon completion of 15 quarter units of work in school administration subjects as outlined under group (1) of requirements for the Administration Credential.]

Class D—Credential in Supervision of Attendance and Child Welfare

1. A valid California Certificate, Credential, or Life Diploma of elementary or secondary grade.
2. Two years of thoroughly satisfactory school experience.
3. A minimum of 22½ quarter units in Education courses relating to supervision of attendance and child welfare.

VIII. EDUCATIONAL RESEARCH CREDENTIALS

(I) Short-Term Research Director's Credential

[Valid for one year and may be renewed twice, on evidence as to successful practice or the completion of further requirements leading to a long-term credential.]

An applicant for the short-term Research Director's Credential must present the following:

1. A certificate that he is physically and mentally fit to engage in school work.
2. A Master's or a Doctor's degree in Education or Psychology, or related lines of work.
3. Evidence as to having complied with one of the following requirements:
   a) Completion of all requirements for the general administration or general supervision credential.
   b) Two years of successful experience as a full-time director, associate director, or assistant director of a bureau or department of educational research.
   c) Satisfactory completion of a specific course or courses in an accredited teacher-training institution, in each of the following fields:

(1) Educational Statistics (Courses 185, 240, 241)
(2) Educational Tests and Measurements (Courses 186, 244)
(3) Mental Tests and Testing (Courses 188, 189, 245, 314)

d) Two years of full-time successful experience under capable direction in the fields listed under professional growth, below.

(II) Long-Term Research Director's Credential

[Valid for five years, and may be renewed for five-year periods upon evidence of successful experience as director, associate director, or assistant director of a bureau or department of educational research for at least two full school years, or by professional growth as shown by continued study or by original contributions to the scientific literature of educational research.]

An applicant for a long-term Research Director's Credential must present the following:

1. A certificate that the applicant is physically and mentally fit to engage in school work.
2. A Master's or Doctor's degree in Education or Psychology, or in related lines of work, with a minimum of one and one-half years of full-time postgraduate work.
3. Completion of a specific course or courses in each of the following fields:
   a) Educational Statistics (Courses 185, 240, 241)
   b) Educational Tests and Measurements (Courses 186, 244)
   c) Mental Tests and Testing (Courses 188, 189, 245, 314)
   d) 6 quarter units of advanced work in each of three of the following fields:
      (1) School Administration and Finance
      (2) School Supervision
      (3) Curriculum
      (4) Individual Research

IX. PRELIMINARY CREDENTIALS FOR PRACTICE TEACHING

Recommendations for Preliminary Special or Preliminary Regular Elementary, Junior High, or High School Teachers' Certificates, authorizing the holder to do cadet teaching, without salary, in any school, are also granted to those enrolled for Practice in Teaching, Education 202. Application for these is made through the Director of Practice Teaching, Professor Benjamin.

APPLICATION FOR A TEACHING CREDENTIAL

When any student has spent the requisite time in study at this University, and has completed the prescribed program of studies in Majors and Minors for the High School Teacher's Recommendation; or the special course of study required by the School of Education and by the regulations of the state for an Elementary School, a Junior High School, a Junior College, or for the Administration, Supervision, or other Special Type of Teacher's Recommendation, such student must make application early in the last quarter of residence at the University for a credential of the type of certificate desired, and leave such application with the Secretary of the School of Education, in Room 52. Students who plan to complete requirements during the summer quarter must make application in May, that there may be no delay in receiving credentials before the opening of schools in the fall.

The credential desired is granted only after the application has been approved by the Committee on Credentials and Degrees of the School of Education, and is then forwarded for signature, to the Commission on Credentials of the State Board of Education, at Sacramento. Upon presentation of this credential to any County Superintendent of Schools in California a certificate will be issued. This procedure is made necessary by a requirement of the Constitution of California that the actual teacher's certificate can be granted only by the counties.

Application blanks for all types of credentials may be obtained from the Secretary of the School of Education, and must be returned to her when correctly filled out and signed by the recommending major and minor departments.

VOCATIONAL GUIDANCE

The Committee on Vocational Guidance is maintained for the purpose of "disseminating among students the information necessary to make an intelligent choice of a vocation and to arrange a course of study preparatory to entering the vocation chosen." In accordance with this purpose the Committee has prepared a bulletin of Vocational Information dealing with the vocations which university graduates enter, which will be mailed to any address on receipt of twenty-five cents.

The Committee has also arranged general conferences on vocations for women and has provided occasional talks on particular vocations. The University Library maintains a section of books, pamphlets, and bibliographies which are available to students who wish to make a more extended study of vocations. The Appointment Secretary is able to indicate the opportunities for employment in the various vocations.

No vocational counselor is maintained by the University, but the Committee provides individual conferences with students who indicate their wish for such assistance. The chief aim of these conferences is to refer students to the best sources of information available regarding any matters pertaining to vocations.

While a student is expected to choose a vocation before or during his course of study, the University does not attempt to give full training for this vocation. However, it is believed that one who has met the requirements for graduation from a given department and has made a wise selection of special courses, both in the major department and in other departments will have an excellent foundation for the vocation he has chosen. After graduation it may be necessary to do graduate work in another institution; or to serve as an apprentice; or to take a minor position which may ultimately lead to a permanent vocation.

APPOINTMENT OFFICE

The office of the Appointment Secretary is located on the second floor of the Administration Building in Room 170. The duties of this secretary are briefly as follows:

1. To assist students and graduates of the University to obtain permanent employment or promotion in the kind of work for which they have prepared themselves.

2. To help students of the University who are earning part or all of their own expenses to find suitable part-time employment.

3. To help students to find full-time temporary employment, whether the purpose be merely to earn money or to become more proficient in their chosen field of work.

4. To give inquiring students and graduates as accurate information as possible regarding the actual opportunities presented by the different fields of employment. The investigation which this work involves is an important feature of the Appointment Secretary's duties.

Statistics covering the work accomplished are compiled annually, and copies of these are available for other colleges and universities, and for anyone personally interested, upon request.

The Appointment Secretary aims to secure and keep on file a complete record of the education, experience, and personal qualifications of each applicant for a position, to be used by prospective employers in determining whether or not the applicant is qualified for the position to be filled. In order that the statements made may be frank and reliable, they are never shown to applicants.

The University reserves the right of refusing to extend its co-operation to applicants who apply for positions for which they are manifestly unfit.

Forms for registration may be obtained of the Appointment Secretary upon request. When asking for forms it is necessary to state whether part-time, temporary, or permanent employment is wanted, and, in the case of permanent employment, whether teaching or some other profession.

Teachers must renew registration annually, preferably in November. Registration after February, though permissible, seriously interferes with placement. Those desiring permanent employment other than teaching should renew their registration the first of every month—particularly the first of September, which is the beginning of the fiscal year. Those seeking part-time or temporary employment must renew registration at the beginning of each quarter. The responsibility of renewing registration is placed upon the applicant.

New students who expect to earn part or all of their expenses at the University should apply to the Appointment Secretary for registration forms as soon as possible after being assured of admission to the University.

A nominal fee is charged applicants for permanent positions at the time of registration, in order that carefully compiled personnel records may be made for those desiring them. This sum covers the actual cost of collecting records. A small charge is also made for editing, copying, and mailing records. All classes of applicants are charged for telephone and telegraph bills incurred in their behalf. No charge is made for services rendered applicants for part-time or temporary work, and no charge is made for the securing of positions of any kind.

All communications should be addressed to The Appointment Secretary, Stanford University, California.

COURSES OF INSTRUCTION

1928–29

[*The asterisk (*) indicates that the course is repeated for the quarter named; otherwise courses announced for two quarters or more may be interpreted as continuing from one quarter to the next. Courses numbered from 1 to 99 inclusive are primarily for lower division undergraduates; from 100 to 199 inclusive, for upper division undergraduates; from 200 to 299 inclusive, for graduate students. The enrollment in the various courses is printed in italics at the end of the descriptive matter.*]

SCHOOL OF BIOLOGY

Carl Lucas Alsberg, Charles Haskell Danforth, Ernest Gale Martin (*Chairman*), Walter Richard Miles, George James Peirce, Edwin William Schultz, James Perrin Smith, John Otterbein Snyder, Robert Eckles Swain, Charles Vincent Taylor, *Executive Committee.*

The School of Biology includes the following departments or subjects within departments: Anatomy, Bacteriology and Experimental Pathology, Biochemistry, Botany, Experimental Psychology, Food Research, Hopkins Marine Station, Paleontology, Physiology, and Zoölogy. (Courses in Biochemistry, Experimental Psychology, Food Research, and Paleontology are listed under separate headings.) Programs are offered leading to the degrees of Bachelor of Arts, Master of Arts, and Doctor of Philosophy in Biology. These are supplementary to the programs offered by the various individual departments of the School.

Graduation.—The requirements for the degree of Bachelor of Arts in Biology are as follows: Sixty units of work in the biological sciences, so chosen that there shall be fifteen units from each of three departments of the School. Provision is made for modifying the fifteen-unit departmental requirement to the effect that upon completion of ten units in any department the student may substitute work in another department upon securing the consent of both departments concerned and of his adviser in the School. The general program must be properly approved. Students are urged to include a summer or other quarter of work at the Hopkins Marine Station. One or more college courses in mathematics will be found helpful.

Advanced Degrees.—Candidates for the degree of Master of Arts in Biology must fulfill the conditions outlined on pages 153–154, including the completion of a program of advanced study in biological science which has been approved by the Executive Committee of the School of Biology at the time of registration for the degree.

Candidates for the degree of Doctor of Philosophy in Biology must fulfill the conditions outlined on pages 156–158. In addition to this it is understood that the candidate's preparation shall include a basic knowledge of the classification, structure, and function of both plants and animals. The

candidate's program of graduate study must be approved by the Executive Committee of the School of Biology prior to its submission to the Graduate Study Committee.

GENERAL BIOLOGY

The courses in General Biology (Biology 1 and 2) are under an Administrative Committee composed of Professors Burlingame (Executive Director), Heath, E. G. Martin, and Peirce.

These courses attempt to present to beginners by means of lectures, illustrations, demonstrations, and laboratory exercises the fundamentals of Biology in its broadest sense. They include a study of: (1) Protoplasm, the common living substance of all plants and animals; (2) The organization of cells and their combination into multicellular organisms; (3) The rôle of green plants in the manufacture of foods; (4) The transformation of foods into the living substance of plants and animals; (5) The liberation and utilization of the chemical energy of foods; (6) The sensitivity of protoplasm and its rôle in correlating the internal processes of the organism on the one hand and relating and adjusting it to its environment on the other; (7) Disease and death of organisms; (8) The enrichment of the soil through the decomposition of organic remains and nitrogen fixation; (9) The perpetuation of the species through reproduction; (10) The laws and mechanism of heredity; (11) Evolution and adaptation of organisms; (12) The factors controlling the ecological and geographical distribution of organisms; and (13) Man's place in nature.

There are no prerequisites to the courses in General Biology, and both courses are required of all Lower Division students not presenting a high-school equivalent, before admission to the Upper Division. (See page 151.)

1. Biology.—Lectures and laboratory work.
5 units, autumn and *winter quarters
Lec. (Burlingame, Doane, Martin, Peirce, Taylor, Wilbur) TTh 8
Lab. (Vestal or Whitaker and Assistants) MW 1:05–4:05 or TTh 1:05–4:05
Autumn, 205; winter, 144

2. Biology.—Lectures and laboratory work.
4 units, winter and *spring quarters
Lec. (Burlingame, Danforth, Martin, Smith, Stone, Vestal) MW 8
Lab. (Vestal or Whitaker and Assistants) (winter) TTh 8–10, or Th 10–11 and F 1:05–4:05; (spring) MW 1:05–3:05, or TTh 1:05–3:05
Winter, 135; spring, 81

ANATOMY

Arthur William Meyer, Charles Haskell Danforth, Frank Mace McFarland, Professors
Clara S. Stoltenberg, Associate Professor
Maurice Sheehan, Instructor
Herlwyn R. Green, Acting Instructor
Larus Arthur Sigurdson, Homer Ellsworth Weaver, Assistants in Instruction

The facilities of the Department of Anatomy are always at the disposal of properly qualified students or physicians who desire to undertake the investigation of some problem in gross or microscopic anatomy, embryology, physical anthropology, or mammalian genetics. Any earnest student desir-

ing to investigate a problem in gross or microscopic anatomy or experimental biology need not be deterred by a fear of not being able to obtain the necessary equipment or material, but it is suggested that advanced students or physicians desiring to undertake special work communicate directly with those in charge of the contemplated work. Since the properly qualified graduate student in anatomy should occupy himself mainly with investigation, the chief emphasis is placed upon this rather than upon the pursuit of advanced courses. For the latter the student is referred also to the announcement of courses in the departments of Bacteriology, Biology, Physiology, Zoölogy, and the Hopkins Marine Station.

Advanced Degrees.—Students desiring to be admitted to candidacy for the degree of Master of Arts in Anatomy must have satisfactorily completed one year's work in histology and microscopic anatomy, at least one quarter in embryology, and possess a knowledge of laboratory technique adequate for the investigation to be undertaken, in addition to fulfilling the University requirements as outlined on pages 153-154. For admission to candidacy for the degree of Doctor of Philosophy a reading knowledge of both French and German is further required.

Library.—All the important periodicals on human and comparative anatomy, anthropology, and experimental biology and technique are in the departmental or University Library, and those on medicine in the Lane Medical Library, which, although located in San Francisco, is an integral part of the University Library, and at the service of students.

Deposit Fees.—A deposit of $2.50 for microscopes and of $10 to cover damage to or loss of bones is required of all students registering in gross and in microscopic anatomy. This sum, less charges for damage or loss, is refunded at the close of the academic year, except in the case of students discontinuing work who may obtain the refund at the end of the quarter. Students who are not registered in medicine are charged a fee of $15 per quarter for Course 103, and $5 for each of the other laboratory courses.

COURSES OF INSTRUCTION

101. General Histology and Microscopic Anatomy.—A course dealing with the elementary structure and vital activities of the animal cell, the histology and development of the tissues, and their combination into the organs of the vertebrates, with especial reference to the Mammalia. Open to medical students, and to others properly prepared, so far as laboratory space permits.

4 units, autumn and winter quarters (McFarland, Sheehan) Lec. by arrangement Lab. (autumn) WThF 1:20–4:05; (winter) MT 9–12, W 1:20–4:05
Autumn, 50; winter, 49

103. Dissection of the Human Body.

20 units (Danforth, Meyer, Green, Sigurdson) Lab. (autumn) MW 8–12, TThF 9–12, 9 units; (winter) WThFS 9–12, 5 units; (spring) MTWThF 8–11, 6 units
Autumn, 52; winter, 52; spring, 52

206. Neurology.—A study of the structure of the central nervous system of man by means of dissections and prepared slides, supplemented by dissections of the central nervous system of other mammals. During the winter quarter the course will be given for non-medical students only.

5 units, autumn, *winter, and *spring quarters (Stoltenberg, Weaver) (autumn) Lec. W 8; Lab. MWF 9–12; (winter) By arrangement
Autumn, 43; winter, 1; spring, 1

OPTIONAL AND ADVANCED COURSES

106. Human Heredity.—A study of the facts and problems of heredity in relation to the individual and the population as a whole. Demonstrative experiments in mammalian genetics. Elective for medical students, others by permission.
2 units, autumn quarter (DANFORTH) TTh 8
Autumn, 17

107. Cytology.—The course deals with the structure and functions of the animal cell with special reference to the reproductive processes. Lectures, laboratory work, and assigned reading. Open to those who have had courses in Histology, Embryology, and Microscopic Technique.
3 to 5 units, spring quarter (MCFARLAND) [Not given in 1928–29]

108. Special Courses.—Advanced courses in Histology, Histogenesis, Microscopic Anatomy, Cytology, or Microscopic Technique will be planned to suit the needs of individual students. Open to those who have had courses in Histology and Embryology.
2 to 5 units (MCFARLAND) By arrangement
Autumn, 2; spring, 1

110. Anatomy of the Sense Organs.—A study of the sense organs by means of dissections and prepared slides, supplemented by models and prepared dissections.
2 to 4 units, autumn, *winter, and *spring quarters (STOLTENBERG) (autumn) TTh 8–11; (winter) by arrangement
Autumn, 1; winter, 4; spring, 2

111. Physical Anthropology.—Practical instruction in anthropometric methods, and lectures on anatomical variation and heredity in man.
2 units (DANFORTH) [Not given in 1928–29]

112. Mammalian and Human Embryology.—A course designed especially for pre-medical students. It includes a study of early development in the mouse with special reference to human embryology and the commoner human deformities.
5 units, spring quarter (MEYER, SIGURDSON, SHEEHAN) TTh 1:05–2:05, MWF 1:05–4:05
Spring, 54

113. Histology and Microscopic Anatomy.—An elementary course designed to present the fundamental facts of these subjects with some training in their interpretation. Not open to pre-medical or to medical students.
4 units, winter and *spring quarters (MCFARLAND) MTW 1:05–4:05
Winter, 2; spring, 3

209. Topographical Anatomy.—The work consists of the laboratory study of frozen sections of fetal, infantile, and adult cadavers made in various planes, and of dissected and specially injected preparations, supplemented by models and atlases.
2 to 5 units (MEYER) By arrangement
Autumn, 1

213. Investigation and Special Work.—This work must be arranged for individually with the professor or professors concerned, but may be started at any time.
[Not given in 1928–29]

214. Conferences in Anatomy.—Special topics are assigned for reading and discussion two to three hours weekly. Prerequisites: Courses 101 and 103.
2 to 3 units (MEYER) [Not given in 1928–29]

BACTERIOLOGY AND EXPERIMENTAL PATHOLOGY

EDWIN WILLIAM SCHULTZ, WILFRED HAMILTON MANWARING, Professors
CLAUS W. JUNGEBLUT, Associate Professor
ALBERT PAUL KRUEGER, Instructor
PAUL J. BEARD, Acting Instructor (Winter and Spring Quarters)

The Department of Bacteriology and Experimental Pathology enjoys facilities for both instruction and research work in general and pathogenic bacteriology, filtrable viruses, immunology, and experimental pathology. Properly prepared undergraduates may launch upon a full program of study in the department during their fourth year, and in one year of intensive work may lay the essential foundation for research work in any one of the special fields mentioned. While the department is primarily interested in graduate students desiring to prepare themselves for research careers in bacteriology, every attention is given to undergraduate students who may desire either to spend an additional year in their preparation for the medical school, or to prepare themselves for careers in diagnostic laboratories in hospitals, public health work, etc. Pre-medical students planning to take the Bachelor's degree in bacteriology before entering on their medical studies should present at the end of their third year essentially the same credentials as are required for admission to the School of Medicine. The only difference in this case is that the student spends his fourth year in the department instead of in the School of Medicine.

Recommended Curriculum for Degree of Bachelor of Arts.—The following courses should be included in the Lower Division and Departmental program, and if possible in the following sequence: *First year:* Chemistry 1, 2, 3, or 10, 11, 12; Physics 2 and 3 (if possible); French or German. *Second year:* Chemistry 111, 112, 127 (required); Zoölogy 1, 2; French or German. *Third year:* Chemistry 141, 142, 143, 144 (141 and 142 may be taken in the autumn quarter, 143 and 144 in the winter quarter; or all four courses in the summer quarter); Biology 162; Anatomy 113. *Fourth year:* Bacteriology 201, 202, 203, 204, 205, 209, and 210.

Advanced Degrees.—Applicants for the degree of Master of Arts in Bacteriology and Experimental Pathology will be expected to complete, in addition to the requirements for the Bachelor's degree, the equivalent of forty-five units of work in the University, of which approximately two-thirds must be in the department. The department work will include a thesis based on laboratory work, and Courses 201, 202, 203, 204, and 205, if not included in the undergraduate work.

Candidates for the degree of Doctor of Philosophy in Bacteriology and Experimental Pathology, after the completion of the equivalent of the requirements for the degree of Master of Arts, will follow such courses as are approved by the department, subject to general University regulations.

Fees.—Courses 201 and 204, $20 each; Course 205, $15; Courses 100, 102, and 202, $10; Course 206, $5; Course 210, $2 per unit. Microscope rental, $5 per quarter.

COURSES OF INSTRUCTION

100. General Bacteriology.—Lectures and laboratory work covering a variety of non-pathogenic forms, including those related to the fertility of the

soil and to the dairy and other industries, as well as pathogenic forms concerned in human, animal, and plant diseases. Prerequisites: General Biology and General Chemistry.

6 units, summer quarter (KRUEGER) Lec. MWF 11; Lab. MWF 1–4
Summer, 15

101. Sanitary Bacteriology.—Lectures and demonstrations covering the more important pathogenic bacteria, with special reference to sanitation and preventive medicine. Primarily for non-medical students, such as engineers, nurses, social workers, and those desiring general information in this field. The course should be accompanied, or followed by Course 102. Prerequisites: General Biology and General Chemistry.

3 units, winter and *spring quarters (BEARD, JUNGEBLUT) MWF 11
Winter, 9; spring, 33

102. Sanitary Bacteriology.—Laboratory work covering the ground outlined under Course 101. A portion of the time is devoted to the examination of water supplies and to the bacteriology and mycology of foods. Limited to 50 students.

3 units, winter quarter (BEARD) MWF 1–4
Winter, 9

103. Media, Stains, Reagents.—A course in the preparation of media, stains, and reagents. The students work with the technical assistants. Limited to two students.

2 units, any quarter (SCHULTZ) By arrangement
Summer, 1

104. Elementary Limnology.—Designed especially for sanitary engineers, health officers, physicians, and biochemists. Regular methods of plankton analysis, determination of the significant properties of water in relation to plants and animals, visits to ponds, water supplies, etc. Whipple's *Microscopy of Drinking Water* will be used as a guide. One lecture, one laboratory period, one field trip each week.

3 units, spring quarter (BEARD) Lec. T 9; Lab. ThS 9–12
Spring, 12

201. Medical Bacteriology.—A course devoted chiefly to the pathogenic bacteria, with emphasis on the laboratory procedures employed in the diagnosis of bacterial infections. Prerequisite: Organic Chemistry. Limited to 68 students.

9 units, autumn quarter (SCHULTZ, JUNGEBLUT, KRUEGER)
Lec. MTWThF 1; Lab. MTWThF 2–4
Autumn, 60

202. Filtrable Viruses.—Lectures and demonstrations on the filter passing agents of certain human, animal, and plant diseases. Prerequisite: Course 201, or 101 and 102.

5 units, winter quarter (SCHULTZ) MWF 8–12
Winter, 16

203. Principles of Immunity.—A course of lectures on immunity and serologic methods. Must be preceded or accompanied by Course 201.

2 units, autumn quarter (JUNGEBLUT) TTh 11
Autumn, 24

204. Serology.—A laboratory study of the toxin-antitoxin reaction, bacteriolysis, hemolysis, agglutination and precipitin reactions; phagocytosis, complement fixation, anaphylaxis, etc. Not given for less than eight students. Must be preceded or accompanied by Course 203.

2 units, autumn quarter (JUNGEBLUT) TTh forenoons
Autumn, 15

205. Experimental Pathology.—A study of the more important pathologic entities, including those due to circulatory disturbances, regressive and progressive tissue changes, pigmentation, inflammation, granulomata, and tumors. The work is presented largely from the experimental point of view. Primarily for bacteriology majors and those desiring an introduction to general pathology. Prerequisites: Histology and Medical Bacteriology.
5 units, winter quarter (SCHULTZ, KRUEGER) [Not given in 1928–29]

206. Histopathologic Technique.—A course in the preparation of pathologic material for histologic study. Limited to two students.
2 units, any quarter (KRUEGER) By arrangement
Autumn, 8

207. Advanced Bacteriology.
2 units, winter quarter (SCHULTZ) By arrangement
Winter, 11

208. Research Seminar.—Students present summaries of the progress of their researches and reviews of the literature bearing on their studies. Required of all majors doing research work in the department.
1 unit, winter, spring, and summer quarters (SCHULTZ) TTh 11
Winter, 11; spring, 12; summer, 2

209. Journal Club.—A study of current literature in bacteriology, immunology, and the filtrable viruses, with weekly conferences.
2 units, autumn, winter, spring, and summer quarters (JUNGEBLUT) M 4
Autumn, 6; winter, 12; spring, 1; summer, 3

210. Advanced Work: Research.—Qualified students may begin research work at any time in either bacteriology, immunology, filtrable viruses, or experimental pathology. Candidates must present at least the equivalent of Courses 201, 203, and 204, together with a satisfactory scholastic record.
5 to 10 units, any quarter (SCHULTZ, JUNGEBLUT, KRUEGER) By arrangement
Autumn, 3; winter, 14 (3 groups); spring, 17 (3 groups); summer, 6 (2 groups)

211. Research in Immunological Theory.—An opportunity for four students to act as research assistants in immunological theory, the problem being approached by physiological and biochemical methods. An independent problem will be assigned by the beginning of the third quarter. Prerequisites for independent work: Chemistry 141, 142, 143, 144; Physiology 104, 105; Bacteriology 201, 203, 204, or equivalents, and a dependable immuno-physiological technique.
5 to 10 units, autumn, winter, and spring quarters (MANWARING) By arrangement
Autumn, 1; winter, 1; spring, 1

BIOLOGY

†LAURENCE B. BECKING, LEONAS LANCELOT BURLINGAME, CHARLES VINCENT TAYLOR, Professors
ARTHUR GIBSON VESTAL, Assistant Professor
DOUGLAS MERRITT WHITAKER, Instructor

[With the co-operation of PROFESSOR DANFORTH of the Department of Anatomy and PROFESSOR PEIRCE of the Department of Botany.]

100. Microscopical Technique.—Registration is limited to such students as are already engaged in work on a research problem or are preparing to

† At Hopkins Marine Station.

undertake one. Registration only after consultation with the instructor. Syllabus fee, $1 per unit.
3 or more units, winter quarter (BURLINGAME) Forenoons by arrangement
Winter, 1

150. Genetics.—Lectures, assigned reading, and conferences on inheritance in plants, animals, and man. Prerequisite: General Biology, or equivalent.
3 units, spring quarter (BURLINGAME) MWF 10
Spring, 25

152. Problems in Genetics.—This course offers an opportunity to continue advanced work along the lines of Course 150.
Any quarter (BURLINGAME) By arrangement
Autumn, 3; winter, 3; spring, 2

160. The Biology of Protoplasm.—An account of the fundamental architecture of protoplasm, its elementary physico-chemical and physiological properties and the differentiation and integration of its diverse structures having specific functions. Laboratory work includes microscopic studies of living material, chiefly Protozoa, with the aid of improved micromanipulation methods. For senior and graduate majors in the School of Biology. Limited to eight students. Prerequisite: Chemistry 147.
4 units, winter quarter (WHITAKER, TAYLOR) TTh 9 and TTh 1–4
Winter, 5

163. Ecology: Environmental Relations.—Lectures on aspects of general ecology: (1) The environment, physical factors, natural habitats; (2) Environmental characters of the organism (adaptations) in structure, physiology, behavior, and life history; (3) Relations to other organisms, antagonistic, symbiotic, and social; (4) Communities of organisms, and their development; (5) Distribution of species and of communities. Illustrative laboratory and field work, with individual study of a local community or group.
3 to 5 units, spring quarter (VESTAL) MWF 1–4
Spring, 9

164. Ecology: Individual Study.—Special work on a selected subject in which the student is qualified.
3 to 5 units, any quarter (VESTAL) By arrangement
Autumn, 1; winter, 5; spring, 2

170. Cytology.—Reading, conferences, and laboratory exercises on the structure of the cell. Especial attention is given to the structure and behavior of the nucleus with particular reference to its function in heredity. Prerequisite: One year of plant or animal morphology.
5 units, winter and *spring quarters (BURLINGAME) MTWThF 10–12
Winter, 5; spring, 1

171. Human Heredity.—A review of the facts and problems of heredity in relation to the individual and to the population as a whole.
2 units, autumn quarter (DANFORTH) TTh 8
Autumn, 17

202. Physiology of the Cell.
5 units, summer quarter (BECKING) [Given at Hopkins Marine Station]

203. Research: Ecology.—Research in ecological relations of local plant or animal communities, or of particular groups of organisms.
(VESTAL) By arrangement
Autumn, 1

240. Research: Physiology of the Cell.
(BECKING) [Given at Hopkins Marine Station]

250. Research in Cytology and Genetics.—For students who wish to undertake original work in genetics or cytology. Prerequisites are an ade-

quate training in biology and such special courses as the nature of the work makes necessary.

Any quarter (BURLINGAME) By arrangement
Autumn, 3; winter, 1; spring, 2

260. Research: Biology of Protoplasm.
(TAYLOR, WHITAKER) By arrangement
Autumn, 4; spring, 1

[Elementary Limnology.—See Bacteriology 104.]

[Teachers' Course in Biology.—See Education 203.]

Fees are charged in the various courses approximately sufficient to cover the cost of the perishable materials and syllabus used, as follows: Courses 10, 100, 152, 163, 170, $1 per unit, each; Course 150, $1; Course 160, $3. The fees for Courses 203, 250, and 260 are charged according to special arrangement with the instructor concerned.

BOTANY

DOUGLAS HOUGHTON CAMPBELL, Professor Emeritus

GEORGE JAMES PEIRCE, LEROY ABRAMS, GILBERT MORGAN SMITH, Professors
JAMES IRA WILSON MCMURPHY, Associate Professor
WILLIAM AUSTIN CANNON, WILLIAM FRANKLIN WIGHT, Lecturers on California Botany
JOHN WYNN GILLESPIE, KATHERINE W. HOPPAUGH, CARL BRANDT WOLF, Assistants in Instruction

[With the co-operation of PROFESSORS BECKING and BURLINGAME and ASSISTANT PROFESSOR VESTAL of the Division of Biology.]

The Department of Botany aims to provide instruction for two classes of students: (*a*) Students who wish to know something of the structures, life processes, relationships, and uses of plants, and to gain some familiarity with the methods of scientific work; and (*b*) Professional students who look forward to investigation, teaching, or the technical applications of Botany in Plant Breeding, Forestry, Agriculture, Horticulture, Plant Pathology, Sanitation, and Public Health. Courses 1, 2, and 3, which present the elements of the more important divisions of botanical study, are designed to meet the needs of both groups of students. Courses 110, 111, 112, 113, 114, 120, 130, 140, 141, are open to students who have had Courses 1, 2, and 3, or the equivalent. It is the aim of these courses to give the student, by means of lectures and references to the literature, a general and summary account of the present state of knowledge, and in the laboratory and the field to afford him an opportunity for a personal acquaintance with plants themselves. Students who have had two or more years' work may, after consultation, be registered in Courses 121, 122, 131, 142, 210.

Department Resources.—The resources of the department afford exceptional opportunities in a number of fields. Students will be received in five

lines of botanical study, namely, morphology (with Professor Smith), cytology and genetics (with Professor Burlingame), physiology (with Professors Peirce and Becking), taxonomy and plant geography (with Professors Abrams and Vestal), mycology and plant pathology (with Professor McMurphy). The laboratories are equipped with apparatus and appliances for these subjects, and the University Library contains the necessary references. In addition, the collections of Professor Campbell in various parts of the world, and the richness of the local flora, offer special opportunity for work in the Archegoniatae. The extraordinary climatic conditions, permitting plants to grow throughout the year and allowing the successful cultivation of plants from many other parts of the world, furnish fresh material and the opportunity for physiological and genetical work under natural conditions.

The Arboretum, established by Senator Stanford prior to the opening of the University, covers approximately 200 acres and contains a large variety of conifers as well as many trees and shrubs of other species. In 1916 it was made an integral part of the Department of Botany, and plantings and replacements were begun with a view to bringing together not only a large variety of exotic species, but also a comparatively complete collection of the trees and shrubs native to western North America.

The Experimental Garden and greenhouses, besides the extensive permanent plantings in the Arboretum and elsewhere on the grounds of the University, provide facilities for growing plants under control. Experiments in plant breeding (Professor Burlingame), plant pathology (Professor McMurphy), and physiology (Professor Peirce) are being carried on, and the department will be glad to place these facilities at the disposal of qualified students wishing to do similar work.

Graduation.—Major students in the department will be expected to complete sixty units in Botany, and five units in Zoölogy. The sixty units should include Courses 1, 2, 3, 110, 111, 112, 113, 114, 120, 130, 140, 141, 142. Students should also be able to read French and German.

The Teacher's Recommendation in the University is based on the satisfactory completion of a minimum of two majors, or one major and two minors. A minor in Botany consists of Elementary Botany (Courses 1, 2, 3) and one advanced course, chosen from the following: 110, 111, 112, 113, 114, 120, 121, 130, 140, 141, 142. A major must include the following: Elementary Botany (1, 2, 3), Morphology of the Fungi (120), General Morphology (110, 111, 112, 113, 114), Advanced Systematic Botany (130), Physiology (140, 141, 142), a total of 39 units.

Research Work.—Properly qualified students desiring to undertake research work should register in Courses 211, 220, 230, 240, after consultation with the instructor concerned.

Students looking to Forestry or Agriculture as a profession should include Courses 113, 114, 120, 121, 130, 140, 141, 142 as part of their preparation, and the following subjects in other departments: elementary physics, chemistry, geology and physiography, zoölogy, entomology, economics, and applied mathematics. They should also be able to read French and German.

Fees.—A fee of $1 per unit, up to $3, is charged in the various courses to cover the cost of the perishable materials and syllabus used.

COURSES OF INSTRUCTION

[General Botany (Courses 1 and 2) and Elementary Systematic Botany (Course 3), or their equivalents, are prerequisite to all other courses in Botany.]

1. General Botany.—A study of the vegetative organs of the higher plants with special emphasis on structure and function.
3 units, autumn quarter (McMurphy, Gillespie) MWF 1:05–3:45
5 units, summer quarter (Peirce)
Lec. TTh 1:05; Lab. and Field Work MWF 1:05–3:45
Autumn, 22; summer, 18

2. General Botany.—A continuation of General Botany 1, and comprising an intensive study of representatives from the principal groups of plants. Prerequisite: Course 1.
3 units, winter quarter (Smith, Hoppaugh) MWF 1:05–3:45
Winter, 19

3. Elementary Systematic Botany.—This course is intended to acquaint the student with the classification of the flowering plants. In addition to the laboratory study of representatives of the more important plant families, the student collects and classifies supplementary species.
3 units, spring quarter (Abrams, Wolf) MTW 1:05–3:45
Spring, 17

110. Morphology of the Algae.—Lectures and laboratory work on the morphology and classification of the Algae. (This course is also offered as a five-unit course at the Hopkins Marine Station during the summer quarter.)
3 units, winter quarter (Smith) [Not given in 1928–29]

111. Morphology of the Bryophytes.—Lectures and laboratory work on the special morphology and classification of the Bryophytes.
3 units, winter quarter (Smith) By arrangement
Winter, 6

112. Morphology of the Pteridophytes.—Lectures and laboratory work on the special morphology and classification of the Pteridophytes.
3 units, spring quarter (Smith) By arrangement
Spring, 6

113. Morphology of the Gymnosperms.—Lectures and laboratory work on the anatomy and morphology of the Gymnosperms.
3 units, autumn quarter (Smith) By arrangement
Autumn, 8

114. Morphology of the Angiosperms.—Lectures and laboratory work on the anatomy of vegetative parts and the morphology and development of the floral organs of Angiosperms.
3 units, autumn quarter (Smith) By arrangement
Autumn, 10

120. Morphology of the Fungi.—Lectures and laboratory work on the morphology and classification of Fungi. Prerequisite: Botany 2.
3 units, winter quarter (McMurphy) By arrangement
Winter, 7

121. Plant Pathology.—Lectures, laboratory, and field work on fungous and other plant diseases. Open only to students who have had Course 120 or its equivalent.
5 units, spring quarter (McMurphy) [Not given in 1928–29]

122. Advanced Plant Pathology.—Field and laboratory work on special diseases.
(McMurphy) [Not given in 1928–29]

123. Advanced Mycology.—Field and laboratory work on special Fungi or groups of Fungi.
(McMURPHY) By arrangement
Autumn, 1; winter, 1

130. Advanced Systematic Botany.—Lectures and laboratory work on the phylogeny, classification, and geographical distribution of the Gymnosperms and Angiosperms.
3 units, autumn, winter, and spring quarters (ABRAMS) MWF 1:05–3:45
Autumn, 8; winter, 7; spring, 7

131. Special Taxonomy.—Special problems in taxonomy and geographical distribution.
(ABRAMS) By arrangement
Autumn, 3; winter, 2; spring, 1

140. Plant Physiology.—The manufacture of food and fuel. Lectures, laboratory work, and reading. Knowledge of the elements of physics and chemistry is required.
3 units, autumn quarter (PEIRCE) By arrangement
Autumn, 9

141. Plant Physiology.—The use of food and fuel. Lectures, laboratory work, and reading. Knowledge of the elements of physics and chemistry is required.
3 units, spring quarter (PEIRCE) By arrangement
5 units, summer quarter (PEIRCE) Lec. TTh 2:05; Lab. MWF 1:05–3:45
Spring, 7; summer, 5

142. Plant Physiology.—Growth, irritability, reproduction. Lectures, laboratory work, and reading. Knowledge of the elements of physics and chemistry is required.
3 units, spring quarter (PEIRCE) [Not given in 1928–29]

200. Journal Club.—Oral reports on the current literature of Botany by the departmental faculty and graduate students.
Autumn and spring quarters M 7:30 P.M.
Autumn, 11; spring, 10

210. Advanced Special Morphology.—The department offers work supplemental to Courses 110, 111, 112, 113, or 114 by means of assigned readings and laboratory study. Its collections are particularly rich in preserved material and microscopic preparations of Bryophytes and Pteridophytes.
(SMITH) By arrangement
Spring, 3

211. Research in Morphology.
(SMITH) [Not given in 1928–29]

220. Research in Plant Pathology.
(McMURPHY) By arrangement
Autumn, 1; spring, 1

230. Research in Taxonomy.—The graduate work in Taxonomy is given at the Dudley Herbarium in the Museum Building.
(ABRAMS) By arrangement
Autumn, 3; winter, 6; spring, 4

240. Research in Physiology.
(PEIRCE) By arrangement
Autumn, 2; spring, 1

The following courses, while listed under Biology or the Hopkins Marine Station, may be credited toward degrees in Botany, namely: Genetics and Cytology (Biology 150, 152, 170, 250), Cellular Physiology (Biology 162, 202), Ecology (Biology 163, 164, 203).

SUMMER QUARTERS

In 1930, and during each summer quarter thereafter, it is expected that work will be offered at the Hopkins Marine Station on the Algae, of both fresh and salt water; and either at the Hopkins Marine Station or at the University, or at both places, the following courses:

Elementary Botany
Taxonomy of Seed Plants
The Physiology of Plants (if at the Hopkins Station, with especial reference to aquatics)
Research in Morphology and Physiology

DUDLEY HERBARIUM

LeRoy Abrams, Director
James Ira Wilson McMurphy, Curator of Mycological Collection
Roxana Stinchfield Ferris, Assistant Curator

The Dudley Herbarium, named in honor of the late Professor William Russel Dudley, occupies the second floor of the south wing of the Museum Building. The mounted collections consist of approximately 170,000 specimens of vascular plants and 10,000 specimens of the lower cryptogams. Among the more important collections in the Herbarium are the William Russel Dudley, the William H. Harvey, and the Samuel B. Parish collections. The Herbarium is especially rich in material from western North America and offers unusual facilities for critical systematic and distributional studies of the flora of that region.

Botanical exploration is carried on each season by the Director and one or more members of the staff, and properly qualified students are encouraged to participate in this work.

The special and research courses in taxonomy scheduled in the Department of Botany are given at the Herbarium.

HOPKINS MARINE STATION

†Walter Kenrick Fisher, Director
Charles Vincent Taylor, Associate Director
Laurence B. Becking, Harold Heath, Gilbert Morgan Smith, Professors
Ivey Foreman Lewis (University of Virginia), Joseph Needham (Cambridge University), Acting Professors (Summer Quarter)
Tage Skogsberg, Frank Walter Weymouth, Associate Professors
Cornelis Bernardus van Niel, Acting Associate Professor
Harold Mestre, Acting Assistant Professor
George Eber MacGinitie, Instructor, and Custodian of Buildings, Equipment, and Supplies
John Sterling Kingsley, Charles Atwood Kofoid, Arthur Russell Moore, Lecturers

† Absent on leave, spring and summer quarters.

ORGANIZATION

The Hopkins Marine Station is a department of the University, controlled by the Board of Trustees, the President, and the Academic Council in the same manner as other departments of the University.

The staff consists of the Director and those members of the University Faculty who offer regular courses of instruction at the Station.

LOCATION AND EQUIPMENT

The Station is situated at Pacific Grove, on the south side of Monterey Bay, California. The ground area comprises seven and a half acres, consisting of the main portion of Cabrillo Point, with complete control of the coast line of the Point and including an excellent sheltered landing place and harbor for boats.

The first unit, the Alexander Agassiz Laboratory, erected in 1917, is of reinforced concrete construction, approximately forty feet by eighty-three feet, and three stories in height. The first floor provides an aquarium room, containing a large floor aquarium and tables for small aquariums; a concrete-floored room for the storage of boats, collecting apparatus, etc.; a store room, furnace room, photographic dark room, and two research rooms.

The second floor, into which the main entrance opens, is devoted to the three large general laboratories. Two private laboratories for instructors are also provided on this floor. The third floor contains a large library, with a generous fireplace, an adjoining instrument room, an advanced laboratory, and seven private laboratories for investigators. Fresh and salt water are provided in each laboratory, the sea water being pumped to a concrete tank upon the roof, whence it is distributed to the various aquarium tables. Heating is provided by a hot-air system, and electric lights and gas are installed. From the third floor a stairway gives access to the flat, parapeted roof.

There are thus five laboratories available for classes and eleven private laboratories for investigators.

The construction of a second unit of the station, known as the Jacques Loeb Laboratory, was completed in July, 1928. The new building, devoted to experimental biology, is of reinforced concrete construction and consists of a two-story central portion, with two flanking wings of one story, enclosing three sides of a front court, the over all dimensions being ninety-five by one hundred fifty-two feet.

The eastern half of the first floor consists of a general laboratory, thirty-three by twenty-four feet, three advanced laboratories, four private rooms, two store rooms, and an office. The western half comprises a chemistry laboratory, two other large rooms for special work, a thermostat room, a balance room, a small store room, a special apparatus room, two constant temperature rooms, three small dark laboratories, a photographic dark room, and a general office. The principal laboratories and work rooms are supplied with sea water, hot and cold fresh water, gas, direct and indirect current, compressed air, and vacuum outlets. Heating is by steam. The second story consists of two stack rooms, a reading room, and two private rooms.

The adjacent boiler house, in addition to the central installation for the various systems of pipes, contains a store room and a work shop.

A new sea water tank has been constructed west of the building, on an elevation of rocks, so that all vibration from pumps is eliminated. The new pumping station is on the extreme western part of Cabrillo Point, where a supply of pure sea water is available.

The Station fulfills a twofold purpose; first, it provides for research in biology; second, it furnishes, under exceptional natural advantages, elementary and advanced instruction in biology.

The Station is open the entire year. Investigators and special students can be accommodated at any time. Regular classes are scheduled for the spring and summer quarters only.

NATURAL RESOURCES

The marine flora is rich in brown and red algae, the former including abundant and characteristic kelps of large size.

The wealth of marine forms is in part due to the diversity of environment, which ranges from a rugged granite coast, broken by beaches, to sheltered estuaries alive with mud-loving species.

The groups which especially give character to the fauna are the coelenterates, polyclads, nemerteans, bryozoans, echinoderms, chitons, gastropods, polychaets, the higher crustacea, and the tunicates. Among actinians, Bunodactis, Epiactis, Urticina, and Corynactis are the high lights. The solitary coral, Balanophyllia, is abundant. There are about ninety species of hydroids and in summer the bay is full of Aurelia, Chrysaora, and Pelagia. Scyphistomas are always procurable. Siphonophores and ctenophores are occasionally common but of uncertain occurrence.

For experimental biology an abundance of sea urchins (*Strongylocentrotus purpuratus* and *franciscanus*) and sand dollars are available. The sea star, *Patiria miniata,* is equally good. *Leptasterias aequalis* and *Henricia leviuscula* brood their eggs. The same is true of the small holothurians, *Cucumaria curata* and *Thyonepsolus nutriens.*

There are upward of fifty species of chitons, the largest, *Cryptochiton stelleri,* reaching a length of twelve or fifteen inches. Prosobranch and nudibranch gastropods abound. The large abalone (*Haliotis*) is the outstanding mollusc of the coast. Dorid nudibranchs are conspicuous for their size and brilliant coloring. The bay teems with squid in spring and summer, and octopus, which is common but not easy to procure, reaches a weight of forty pounds.

Among the polychaets there are numerous representatives of Halosydna, Polynoe, Nereis, Leodice, Lumbrinereis, Glycera, and Amphitrite. A large sabellid, Eudistylia, is abundant, while every rock-pool is alive with serpulids. Less easily procured are two species of Arenicola. Sipunculids are abundant and large. Of special interest are two phoronids, *Phoronis vancouverensis* and *Phoronopsis harmeri.* The former carries embryos in summer. Conditions appear to be ideal for flat-worms and nemerteans. Bryozoa, especially the encrusting forms, are conspicuous and compete for available surface with sponges and very thrifty compound ascidians.

Among the crustacea the crabs are most conspicuous, but of more interest is the primitive burrowing shrimp, Callianassa, and the pistol shrimp, Crangon (Alpheus). Hippa is abundant as are also pagurids and several mysids. Barnacles of several species are very abundant, on the granite, and of course swarms of isopods and amphipods.

Mention should be made of the hag-fish, Polistotrema, of the chimaeroid, *Chimæra colliei,* and of the midshipman, *Porichthys notatus,* which is equally interesting for its conveniently deposited eggs and numerous photogenic organs.

The plankton of the bay is rich in larval forms and protozoa.

GRADUATE WORK

With the completion of the new laboratory for experimental biology, the Station is provided with facilities for research work in the biology of the cell, biophysics, biochemistry, certain special phases of bacteriology connected with the ocean, experimental morphology, as well as for the more traditional lines of approach in zoölogical investigation. As rapidly as means permit the present permanent staff will be augmented by other specialists, whose advice will be available for mature students prepared to carry on independent investigation.

Laboratory facilities and the extraordinary natural resources of the region warrant emphasis being placed upon the opportunity for bona fide research. At the same time beginning students have the advantage of a research environment and the possibility of studying a large number of live animals while these are still fulfilling their rôle in the general scheme of marine and terrestrial life. For such students elementary and advanced instruction is offered in zoölogy, physiology, and botany during the spring and summer quarters.

ADMISSION AND FEE

Candidates for admission should make application to the Director, Hopkins Marine Station, Pacific Grove. The application should state whether admission to the Lower, Upper, or Graduate Division is desired, and in which of the following classes the candidate expects to register:

Class A. Special workers not expecting formal credit and not candidates for degrees.

Class B. Assigned students from institutions which have agreed to accept work completed at the Station in fulfillment of their requirements.

Class C. Fully matriculated students in Stanford University.

(For detailed information regarding procedure and credentials necessary for admission, and the courses offered, see the *Announcement of the Hopkins Marine Station.*)

The General Fee (covering all charges), is $85 per quarter for all graduate and undergraduate students taking regular courses or pursuing special work. Ten dollars of the General Fee for reservation of laboratory space is due at the time of application, and the balance on registration day (*except that for the Summer Quarter the balance must be paid by June 15.*)

Visiting investigators will be charged for the use of instruments and materials not to exceed $50 per quarter.

Late registration will be permitted only with the approval of the Director and of the instructors concerned.

Students will not be accepted for half-quarter registration in any except graduate courses.

COURSES OF INSTRUCTION

WINTER QUARTER, 1929

Formal courses are not offered. Work in Zoölogy for Graduate, Independent Study Plan, or Upper Division students is supervised by Professors Fisher, Heath, and Skogsberg, and Mr. MacGinitie (equivalent of Courses 542 and 580); in Physiology by Professors Becking and Mestre; in Microbiology, by Professor van Niel.

SPRING QUARTER, 1929

[Instruction begins April 1 and ends June 1]

508. Elementary Physiology.—The chief functions of cells, tissues, and organs in relation to structure, as illustrated by marine invertebrates. Students are urged to take Course 510 as a correlative.
5 units (BECKING, MESTRE) By arrangement
Spring, 6

510. Marine Zoölogy.—An introduction to the principles of general zoölogy as these are illustrated by the animals of Monterey Bay. Limited to fourteen students.
5 units (MACGINITIE) Three forenoons per week
Spring, 15

515. Vertebrate Zoölogy.—A study of the evolution of vertebrate form and structure as expressed by the different classes and by adaptations within a selected class. Equivalent to Comparative Anatomy. Limited to fourteen students.
5 units (SKOGSBERG) Three afternoons per week
Spring, 16

540. Marine Invertebrates.—An advanced course dealing with anatomy, classification, and development in certain groups of marine invertebrates. Continued during summer quarter as 541; credit given for either course alone. Open only to students who have had practice in dissection and laboratory methods. [See Course 541, Summer Quarter.] Limited to twelve students.
5 units (SKOGSBERG) [Not given in 1928–29]

542. The Invertebrates.—Independent work of a special character, for undergraduates, on one species, or a group, with reference to morphology, development, classification, or natural history. May be taken in connection with Courses 515, 540, 550.
(HEATH, SKOGSBERG) By arrangement
Spring, 2

550. Vertebrate Embryology.—See same course, Summer Quarter.
5 units (HEATH) Three forenoons per week
Spring, 17

575. Research in General Physiology.—For graduate students.
(BECKING) [Not given in 1928–29]

580. Research in Zoölogy.—The original investigation of problems connected with the development, structure, and natural history of invertebrates.
(HEATH, SKOGSBERG, MACGINITIE) [Not given in 1928–29]

SUMMER QUARTER, 1929

[Registration, June 19; instruction begins June 20; instruction ends August 17; students are not accepted for half-quarter registration except in graduate work.]

511. Marine Zoölogy.—The object of this course is to give the student the widest possible acquaintance with the animals which live along shore

and in the plankton of Monterey Bay. The prescribed work will also include a study of the associations of animals, their distribution, and something of their behavior, or simple reactions. May be undertaken by beginning students. Limited to fourteen students.
5 units (MESTRE) Three forenoons per week
Summer, 13

515. Vertebrate Zoölogy.—See same course, Spring Quarter.
5 units (SKOGSBERG) By arrangement
Summer, 1

521. The Algae.—Lectures and laboratory work on the various classes of algae. Particular attention is given to the marine algae of the Pacific Coast. Limited to fourteen students.
5 units (SMITH, LEWIS) By arrangement
Summer, 14

539. Physiology of Marine Organisms.—A study of the principles of physiology as illustrated by the life of the ocean. The instruction will be informal and will be determined as to character by the interests and capabilities of the students enrolled. The work will be mainly experimental, supplemented by lectures and conferences as occasions arise. An elementary working knowledge of biology and chemistry will be assumed. Textbook: *The Elements of Physiology,* Martin and Weymouth. Enrollment limited to twelve Upper Division and graduate students.
5 units (NEEDHAM, WEYMOUTH) By arrangement
Summer, 15

541. Marine Invertebrates.—An advanced course dealing with anatomy, classification, and development in certain groups of marine invertebrates. Same as Course 540, spring quarter, but covering a different set of phyla. The two courses, 540 and 541, are arranged to include all the larger groups of marine invertebrates. Either course may be taken without the other. Limited to twelve students.
5 units (SKOGSBERG) MWF afternoons
Summer, 18

542. The Invertebrates.—Independent work of a special character, for undergraduates, on one species, or a group, with reference to morphology, development, classification, or natural history. May be taken in connection with Courses 541 and 550.
(HEATH, SKOGSBERG) By arrangement
Summer, 8

550. Vertebrate Embryology.—A study of the early history of the germ layers in the starfish, followed by a detailed study of the early development of the salamander and mouse. Limited to fourteen students.
5 units (HEATH) TThS forenoons
Summer, 20

570. Research in Biology of Protoplasm.—Investigations on the physicochemical and physiological properties of protoplasm with the aid of improved methods of micromanipulation.
(TAYLOR) By arrangement
Summer, 2

572. Physiology of the Cell.—A laboratory course illustrating properties and functions of the living cell from a quantitative point of view. Prerequisites by consultation. Open to properly equipped graduate and Upper Divisions students.
(BECKING) By arrangement
Summer, 1

574. Problems in Microbiology.—A laboratory course covering various types of autotrophic and saprophytic bacteria of sea water in relation to the cycles of matter. Prerequisites: Bacteriology 1 or 101 or equivalent, and Chemistry 142 or equivalent.
(VAN NIEL) [Not given in 1928–29]

575. Research in General Physiology.—For graduate students only.
(BECKING, MOORE, WEYMOUTH) By arrangement
Summer, 1

580. Research in Zoölogy.—The original investigation of problems connected with the development, structure, and natural history of invertebrates.
(HEATH, SKOGSBERG) By arrangement
Summer, 8

590. Research in Plant Morphology.—Students desiring to do original investigation in morphology must have adequate training in appropriate courses in morphology.
(SMITH, LEWIS) By arrangement
Summer, 4

Courses 510 or 511, 515, and 550 will count toward the requirements in Biology for those desiring to register in Medicine. Courses 508, 510 (511) or 540 (541), 521, and 550 may be taken together. Courses 510 or 511, 540 or 541, and 550 are major requirements in the Department of Zoölogy.

[NOTE.—Course 515, Vertebrate Zoölogy, is intended primarily for premedical students and will be given only in the spring quarter.]

PHYSIOLOGY

OLIVER PEEBLES JENKINS, Professor Emeritus

ERNEST GALE MARTIN, Professor
JOSEPH NEEDHAM (Cambridge University), Acting Professor (Summer Quarter)
JAMES PERCY BAUMBERGER, JAMES ROLLIN SLONAKER, FRANK WALTER WEYMOUTH, Associate Professors
GEORGE DANIEL SHAFER, Assistant Professor
JOHN FIELD, II, VICTOR ERNEST HALL, DOUGLAS MERRITT WHITAKER, Instructors

The Department of Physiology offers courses in Elementary Physiology, specially designed to enable students not preparing to study Medicine to become acquainted with the functioning of the animal body. Advanced courses are offered, primarily for medical students, but so planned that others, if properly prepared, can profit by taking them. These courses are open to qualified undergraduates as well as to graduates. Courses in General Physiology are conducted regularly at the Hopkins Marine Station. At present these are scheduled only in the summer quarter, but it is hoped to offer them in the spring quarter as well in the near future.

In addition to the undergraduate courses mentioned below the Department of Physiology offers a number of advanced courses and is prepared to guide suitably prepared students along various lines of research.

General Physiology.—Particular attention is paid to general physiology. Through connection with the Hopkins Marine Station unusual opportunities are available for the study of the physiology of the rich marine flora and fauna of Monterey Bay, while locally a great variety of land and fresh water organisms may be investigated. For these purposes there is available equipment adequate for the investigation of many of the physico-chemical properties of protoplasm and its environment. For example, one room is devoted to work involving the determination of the hydrogen ion concentration and is provided with a hydrogen electrode, thermostat, potentiometer, buffers, indicators, daylight comparators, etc. Other representative lines of work for which special apparatus are available are oxidation-reduction potentials, kataphoresis, conductivity, viscosity, surface tension, osmotic pressure, etc. For the determination of light conditions there is a thalofide cell equipment and a microphotometrical apparatus.

Vertebrate Physiology.—A colony of rats is maintained with cage equipment by which voluntary activity as related to diet, sex, and other conditions is being studied. There are also ample facilities for animal experimentation of ordinary kind.

Human Physiology.—Various problems in human physiology are constantly being investigated. By co-operation with the Department of Psychology the facilities for the study of the special senses, particularly vision and hearing, are unusually complete. For example, the laboratory is equipped with an illuminometer, with all the more important types of phorometers for the measurement of eye muscle balance, with an Ives visual acuity apparatus and other related instruments. The Barkan collection of works on ophthalmology in the Lane Medical Library makes available a particularly complete representation of the literature of this field.

Library.—The Biology library is well supplied with current books and periodicals and has complete sets of all the important physiological journals, as well as abstract journals and indices in related sciences and a full set of the Concilium Bibliographicum cards for physiology. Most of the less common publications are available in the Lane Medical Library.

Requirements for Graduation.—Students are recommended for the degree of Bachelor of Arts by the Department of Physiology who have fulfilled the requirements for admission to the Stanford School of Medicine, have taken Courses 103, 104, 105, 106, and at least one unit of Course 206 within the department, or in the departments of Anatomy or Bacteriology, and lecture and laboratory courses in biochemistry to the amount required by the Stanford School of Medicine. Anatomy 101 (Histology) is a prerequisite, also, and cannot be counted toward the ten additional units mentioned above as optional from the Department of Anatomy.

The preliminary requirements of the Stanford School of Medicine are: Fifteen quarter units of college biology (General Biology, Comparative Anatomy, and Embryology usually offered); general chemistry, quantitative analysis, lecture course in organic chemistry (22 units of chemistry); thirteen quarter units of college physics; nine quarter units of college English; a reading knowledge of either French or German.

Students who have completed the work of the Lower Division will be admitted as majors in the department, but, to satisfy without serious schedule difficulties the departmental requirements within the regularly allotted six quarters, they will find it advantageous to have taken as much as possible of the required preparatory science while still in the Lower Division.

The departmental requirement for students looking forward to Medicine is designed to enable them to cover the required pre-medical subjects and the work of the first year in the Medical Department of this University, or to fit them to undertake to advantage the work of other first-class medical schools.

In addition to those majors looking forward to Medicine, provision is also made for such as are interested primarily in Physiology as a preparation for teaching or research, or as a phase of biological training.

Graduate Students.—Graduate students will be expected to attend such portions of Courses 103, 104, and 105 as cover the field of their special interest. Candidates for the degree of Doctor of Philosophy will take these courses in entirety unless equivalent courses are offered in substitution. Additional selections from Courses 106, 110, 206, 207, 208, 509, and 539, and work in other departments will be determined by the needs of the student. Graduate students will be expected to be able to consult papers in French or German as occasion arises.

Advanced Degrees.—For the degree of Master of Arts the department will require in general a full year (forty-five quarter units) of advanced work in physiology or closely related fields. It is expected that about two-thirds of this work will be devoted to a special problem whose results are to be embodied in a Master's thesis. It is expected also that the student will be prepared to submit to examination covering such portions of the general field of physiology as related to the special field of study. For example, a student whose field is general physiology should be prepared for examination in the principles of general physiology. One whose work is in special applications of physiology to mammals or man should prepare to be examined in human physiology.

Candidates for the degree of Doctor of Philosophy must conform to the University requirements as regards minor subjects; for the major in physiology it is expected that the equivalent of six quarters will be devoted in the main to work upon a problem involving original investigation and leading to results which shall be of sufficient importance to justify their publication in physiological journals as well as their presentation in the form of a Doctor's dissertation. Registration for the advanced work will be in Courses 207 and 208.

The Teacher's Recommendation.—Programs are offered for students seeking the teacher's recommendation as follows: Teaching major: Elementary Chemistry; Biology, 18 units, including either Comparative Anatomy, Vertebrate Embryology, the Biology of Protoplasm, or Histology; Physiology, 14 units (Courses 103, 104, and 105).

Teaching minor: Elementary Chemistry; Biology, 9 units (Courses 1 and 2); Physiology, 10 units (Courses 101 and 102).

COURSES OF INSTRUCTION

101. Elementary Physiology.—The structure and functions of the body with especial reference to the mechanisms of external adaptation, namely, muscles, nervous system, and sense organs. Designed primarily for students who are not looking forward to the study of Medicine. Intended to impart a general conception of the relationship of the human body to its environment. Textbook: *The Human Body,* Martin, Advanced Course, Eleventh

Edition. Open to upper-division students and to lower-division students who have had college courses in Biology and Chemistry.

5 units, autumn quarter (SHAFER) Lec. MWF 10; Lab. ThF 1:05–4:05
Autumn, 16

101S. Elementary Lectures.—A lecture course open to qualified students. The subject matter of Course 101 is covered. Textbook: *The Human Body,* Martin, Advanced Course, Eleventh Edition. Given only in alternate years.

3 units, summer quarter, first term (SHAFER) MTWThF 9
Summer, 27

102. Elementary Physiology.—The structure and functions of the body with especial reference to maintenance, growth, and energy liberation. In this course, special attention is paid to circulation, digestion, excretion, and metabolism. Although designed to offer in connection with Course 101 a survey of the field of human physiology, this course is planned so that it may be taken independently of Course 101. Textbook: *The Human Body,* Martin, Advanced Course, Eleventh Edition. Requirements for admission the same as for Course 101.

5 units, winter quarter (SHAFER) Lec. MWF 10; Lab. MT 1:05–4:05
Winter, 23

102S. Elementary Lectures.—A course covering the subject matter of Course 102. Given in alternate years.

3 units, summer quarter, first term (SHAFER) [Not given in 1929]

103. Principles of Physiology.—An advanced study of the fundamental principles of physiology. The field is surveyed from the standpoint of the functioning of single cells and of multicellular organisms. An especial effort is made to familiarize the student with basic phenomena and their interpretation. The course serves primarily as a preparation for Courses 104 and 105, but is designed to meet the needs of advanced students who desire a general survey of the field and are unable to devote the time required for taking Courses 103, 104, and 105. Textbook: *The Elements of Physiology,* Martin and Weymouth. Required of majors in the department. Prerequisites for majors: eighteen units of Biology, including Histology; Physics 1, 2, and 100, or their equivalents; Chemistry up to and including Biochemistry. Advanced students of other departments presenting less than these prerequisites may be admitted on recommendation of their major departments provided their previous training is of a character to enable them to take the course with profit; it is desirable that such training include Biology and Elementary Chemistry.

5 units, winter quarter (MARTIN, BAUMBERGER, FIELD, HALL)
Lec. MWF 8; Lab. ThF 1:05–4:05
Winter, 69

104. Physiology of Maintenance.—The detailed application to man of the general principles developed in Course 103, so far as they relate to bodily maintenance. The laboratory work is based, as far as possible, on mammals, including the human body itself. Textbook: *The Elements of Physiology,* Martin and Weymouth. Required of majors in the department. Prerequisite: Course 103.

4 units, spring quarter (MARTIN, BAUMBERGER, FIELD, HALL)
Lec. TTh 11; Lab. ThF 1:05–4:05
Spring, 65

105. Physiology of External Adjustment.—The detailed application of the principles developed in Course 103 to the mechanisms by which in mammals and man the organism is adjusted to its environment; thus comprising a study of the sense organs, the nervous system, and the motor

apparatus. Textbook: *The Elements of Physiology,* Martin and Weymouth. Prerequisites as in Course 103 with Physics 3 in addition. Advanced students of other departments may be admitted on the terms stated under Course 103 provided they present such work in the anatomy of the nervous system and sense organs as will enable them to profit by the course. Required of majors in the department.

5 or 6 units, spring quarter (WEYMOUTH, FIELD, HALL) Lec. MWF 11; Lab. TW or ThF 1:05–4:05
Spring, 64

106. Journal Club.—An introduction to the utilization of biological literature, including bibliographic methods, abstracting, preparation, and presentation of reports, and critical evaluation of original papers. This course or its equivalent required of candidates for a degree in this department.

1 unit, autumn, *winter, *spring quarters (WEYMOUTH) By arrangement
Autumn, 4; winter, 6; spring, 7

110. Physiology of Arthropods.—Special problems involving laboratory work, using insects or other Arthropods as material. Prerequisite: one of Courses 103, 509, 539, or equivalent.

Any quarter (BAUMBERGER, SHAFER, WEYMOUTH) [Not given in 1928–29]

206. Seminar in Physiology.—A weekly meeting of department faculty, graduate, and properly qualified undergraduate students of this and allied departments, for the presentation and discussion of recent advances in physiology which in the course of a series of years will cover the entire field. Prerequisite for majors: Course 106, or equivalent. Courses 106 and 206 required of candidates for a degree in Physiology.

1 or 2 units, autumn, *winter, *spring quarters (WEYMOUTH) By arrangement
Autumn, 4; winter, 6; spring, 20

207. Special Physiology.—An advanced non-laboratory course open to students who have had one or more upper-division courses in Physiology. Designed to afford opportunity for the further study of selected subjects in Physiology. The work is planned for the individual student.

1 to 5 units, any quarter (DEPARTMENT FACULTY) By arrangement
Autumn, 3; winter, 5; spring, 9; summer, 1

208. Research in Physiology.—Special problems involving laboratory work.

(DEPARTMENT FACULTY) By arrangement
Autumn, 3; winter, 5 (2 groups); spring, 9 (2 groups)

COURSES AT HOPKINS MARINE STATION

539. Advanced Physiology of Marine Organisms.

5 units, summer quarter (NEEDHAM, WEYMOUTH) Three afternoons weekly
Summer, 15

PUBLIC HEALTH NURSING

Walter Greenwood Beach, Professor of Social Science
Albert Eduard Michotte (University of Louvain), Acting Professor (Summer Quarter)
Robert Holmes Seashore (University of Oregon), Acting Assistant Professor (Summer Quarter)
Louis Olsen, Acting Instructor in Public Health (Summer Quarter)
Flora May Fearing, Acting Instructor in Political Science and Public Health Nursing (Summer Quarter)

Economics 2: Elementary Sociology.—An elementary study of social principles and problems as found in modern life. Not open to freshmen and not to be taken in lieu of the course in Citizenship.
5 units, summer quarter (Beach) MTWThF 9
Summer, 46

Political Science 119a: Quantitative Studies in Politics and Administration.—A course designed for (1) those students interested in the problem of methods in the measurement and analysis of political phenomena; and (2) those who desire practice in quantitative treatment of governmental problems. The class studies the elementary statistical methods appropriate for dealing with administrative problems, with special emphasis upon (1) serviceable methods of gathering primary data; (2) tabulation of such data; (3) their presentation in such form that they may be used by the public for intelligent analysis and comparison. Students may choose problems in the fields of their immediate interest.
2 units, July 30–August 29 (Fearing) Lec. TTh 2–5 and one hour by arrangement
Summer, 13

Psychology 51: General Psychology.—Survey of the field of mental life. The point of view, methods, and the experimentally attested facts of the science are presented. The primary emphasis is on normal adult psychology and applications to control of human behavior. Animal and abnormal fields are also outlined. Lectures, demonstrations, and exercises. Freshmen, seniors, and graduates may enroll by special arrangement. Extra work is required of seniors and graduates.
5 units, summer quarter (Michotte, Seashore) MTWThF 11
Summer, 59

Public Health 1: Health Department Administration.—This course will consist of lectures on the activities, organization, and powers of public health departments, supplemented by laboratory and field work.
2 units, June 21–July 25 (Olsen) TTh 2–5
Summer, 19

ZOÖLOGY

GEORGE CLINTON PRICE, Professor Emeritus

JOHN OTTERBEIN SNYDER, RENNIE WILBUR DOANE, WALTER KENRICK FISHER, HAROLD HEATH, CHARLES VINCENT TAYLOR (Biology), Professors

GORDON FLOYD FERRIS, MARY ISABEL MCCRACKEN, EDWIN CHAPIN STARKS, FRANK WALTER WEYMOUTH (Physiology), Associate Professors

BARTON WARREN EVERMANN, RICHARD CRITTENDEN MCGREGOR, WILLIS HORTON RICH, CASEY ALBERT WOOD, Lecturers

The Department of Zoölogy offers courses which are carefully planned and so flexible as to place no limit on the student of ability, and in most cases the needs of individuals are considered.

Graduation.—Before graduation in Zoölogy, students must complete Courses 1, 2, 100, 104, 160 (4 units), and 541 and 550 at the Hopkins Marine Station, or satisfactory substitutes, together with at least 20 units of additional elective work in the department. Before graduation, a student is expected to have a reading knowledge of German or French, and to have completed one or more elementary courses in Botany, Physiology, Physics, or Chemistry. It will be noted that the requirement involves enrollment for one quarter at the Hopkins Marine Station.

Students who look forward to the study of medicine may take Zoölogy for their major subject and receive the degree of Bachelor of Arts at the close of a four years' course which shall also contain the first year in medicine. Twenty units of work in the department will be required of such students, including Courses 1, 2, 108, and electives.

Advanced Degrees.—For graduate study leading to the degrees of Master of Arts and Doctor of Philosophy both material and literature are available in the morphology, embryology, and classification of the principal phyla. The proximity of exceptionally rich collecting grounds on the ocean shore, especially at Monterey Bay, where is located the marine biological laboratory of the University, offers unusual facilities for obtaining material and for the investigation of living forms. The department is well prepared to offer work in Entomology, either systematic, biologic, or economic. The laboratories and libraries are well equipped with apparatus, journals, reprints, and books, and special provision will be made for the needs of individual graduate students.

The Teacher's Recommendation.—The Department recommendation for a teacher's certificate in Zoölogy requires the following courses: (Zoölogy as a major) 1, 2, 100, 104, and 541 and 550 at the Hopkins Marine Station, or satisfactory substitutes, and 6 units to be elected; (Zoölogy as a minor), 1, 2, 100, 104, or satisfactory equivalents.

Majors in Biology who elect Zoölogy as a minor, will be required to complete Zoölogy 1, or its equivalent, and certain other courses amounting to 15 units in all.

Equipment.—The collections of the Natural History Museum are extensive in littoral and bathybial forms of the northern and tropical Pacific. There is a full representation of the fishes of North America; extensive

series of the deep waters of the Pacific, and large collections from the West Indies, Hawaiian Islands, Samoa, the Philippines, Bering Sea, Japan, and the coasts of Mexico and Central America. The museum contains also a large representation of the reptiles, batrachians, birds, and mammals of the West. The collection of marine invertebrates is rich in echinoderms and crustacea, and contains a good working nucleus in other groups. The series of deep sea forms is especially valuable. The entomological collections contain authoritatively named specimens in most of the orders of insects. There are available as a basis for research certain unusually extensive collections in special groups, notably the Coccidae, the collection of which is one of the most important in existence, the Mallophaga, Anoplura, and other ectoparasitic groups, and in the Aphids, Diptera, etc. There are also large series illustrating the development, habits, and adaptations of insects, particularly those of economic importance.

A small experimental orchard and an apiary and a lathhouse also add to the opportunities to do practical outside work.

Laboratory Fees.—Courses 1, 2, 105, 108, each $5; 100, 103, 104, 106, 107, 150, 153, 154, 155, 156, 157, each $3; 101, 102, 158, each $.50.

COURSES OF INSTRUCTION

[Courses 1, 101, and 102 may be taken without previous preparation in Zoölogy.]

1. General Zoölogy.—An introduction to the natural history, morphology, and physiology of animal life. Lectures, laboratory, and field work. This course is prerequisite to all other courses in the department except where otherwise stated. (See also its equivalent, Marine Zoölogy [Zoölogy 511], under Hopkins Marine Station.)

5 units, autumn and spring quarters (TAYLOR, FERRIS) MTWThF afternoons
Autumn, 37; spring, 19

2. Comparative Anatomy of the Vertebrates.—A detailed examination of vertebrate morphology, including dissection of representatives of the several classes of vertebrates, with comparative studies in vertebrate osteology, the nervous and circulatory systems. Not open to first-year students in winter quarter.

5 units, winter and spring quarters (STARKS) MTWThF afternoons
Winter, 47; spring, 22

100. The Vertebrates.—A general course in the classification of vertebrate animals, with studies in their habits and the geographical distribution of species. The course is largely devoted to birds. It includes field excursions, and observations of live animals in the laboratory. Open to all students.

5 units, spring quarter (SNYDER) MTWThF 1:15–3:45
Spring, 20

101. General Entomology and Insect Adaptations.—A course of lectures and demonstrations. Open to all students.

2 units, autumn quarter (DOANE) Lec. TTh 9
Autumn, 64

102. Insects and Disease.—A discussion of the insects that cause or disseminate some of the diseases in man and the domestic animals. Lectures and demonstrations. Open to all students.

2 units, winter quarter (DOANE) TTh 9
Winter, 177

103. Arthropod Zoölogy.—A general survey of the arthropoda as an introduction to the study of insects.
3 units, winter quarter (FERRIS) MTWThF forenoons
Winter, 5

104. Classification of Insects.—This course includes laboratory and field work, and is intended to give the student a basic knowledge of the local insect fauna and its relation to its environment, and to acquaint him with the methods and principles of systematic entomology.
5 units, spring quarter (McCRACKEN) Forenoons by arrangement
Spring, 24

105. Morphology of Insects.—A study of insect structures and their significance, involving an introduction to the technical methods of the entomologist.
5 units, autumn quarter (McCRACKEN) Forenoons by arrangement
Autumn, 13

106. Economic Entomology: Forest Insects.—A study of the insect enemies of forest and shade trees. The course includes field, laboratory, and bibliographic work. Prerequisite: Course 104.
3 units, autumn quarter (DOANE) [Not given in 1928–29]

107. Economic Entomology: Orchard and Garden Insects.—A study of the principal injurious and beneficial insects of the orchard and garden. Includes field, laboratory, and bibliographic work, and occasional lectures. Prerequisite: Course 104.
3 units, spring quarter (DOANE) [Not given in 1928–29]

108. Mammalian Anatomy.—A detailed study of one or more systems of organs of the cat. To be preceded by Course 2.
5 units, autumn and spring quarters (STARKS) MTWThF afternoons
Autumn, 11; spring, 8

112. Animal Genetics.—Discussion and demonstrations of the principles of heredity underlying modern practices in improvement of animals.
2 units, autumn quarter (McCRACKEN) Lec. TTh 11
Autumn, 4

150. Vertebrate Zoölogy.—Special studies for advanced students in the fields of herpetology, ornithology, or mammalogy; practice in museum methods, in field observations, and in the collection and preparation of specimens with data.
2 to 5 units, autumn, winter, or spring quarters (SNYDER) By arrangement
Autumn, 5; winter, 4; spring, 3

151. Principles of Nomenclature.—A series of lectures dealing with the principles of biological nomenclature and intended to meet the needs of students from any of the biological departments.
1 unit, spring quarter (FERRIS) By arrangement
Spring, 7

153. Special Problems in Economic Entomology.—The student is here given an opportunity to make a more or less detailed study of some insect or group of insects of economic importance. Field, laboratory, and bibliographic work are included.
3 to 5 units, autumn, winter, and spring quarters (DOANE) By arrangement
Autumn, 2; winter, 1; spring, 2

154. Special Problems in Entomology.—Studies in the classification, structure, or biology of certain groups of insects, such as the Coccidae and the various ectoparasitic orders, with particular reference to the methods of research in such groups.
3 or more units, winter and spring quarters (FERRIS) By arrangement
Winter, 2; spring, 1

155. Special Problems in the Life History, Morphology, or Taxonomy of Insects.—An introduction to research methods in the field of entomology. Problems are assigned with reference to the student's special interest or fitness.

3 to 5 units, autumn, winter, and spring quarters (McCracken) By arrangement
Autumn, 2; winter, 6; spring, 6

156. Special Courses in Vertebrate Zoölogy.

a) Primitive chordates; a study of Amphioxus, the tunicates, and the lampreys.

b) Comparative osteology; modifications of the vertebrate skeleton.

c) The fishes; special problems in the morphology of fishes, or in the review and classification of groups of West Coast fishes.

These courses are arranged to meet the needs of students who are qualified to carry on independent work.

3 to 5 units, autumn, winter, and spring quarters (Starks) By arrangement
Autumn, 4; winter, 2; spring, 1

157. Ichthyology.—An introduction to problems relating to the life history of fishes, the discrimination of species, or a critical examination of some group.

3 to 5 units, autumn and winter quarters (Snyder) By arrangement
Autumn, 6; winter, 5

158. Bionomics.—A survey of facts and principles bearing upon organic evolution. Primarily for advanced students. Assigned reading and reports.

2 units, winter quarter (Taylor) Lec. TTh 11
Winter, 17

159. Problems in Fishery Resources.—A study of selected biological problems encountered in the investigation of fishery resources, especially growth and related questions involving statistical treatment. Weekly conferences may be supplemented by illustrative work to meet the needs of particular students.

1 to 5 units, autumn, winter, and spring quarters (Weymouth) By arrangement
Autumn, 12; winter, 7; spring, 5

160. Journal Club.—Open to senior and graduate students.

2 units, autumn and winter quarters (Members of the Department) By arrangement
Autumn, 14; winter, 16

161. Embryology of Fishes.

3 units, spring quarter (Snyder) By arrangement
Spring, 6

201. Research.—Prosecution of special studies by advanced and graduate students. The work may be done either in the University or at the Hopkins Marine Station.

(Members of the Department) By arrangement
Autumn, 10 (4 groups); winter, 8 (4 groups); spring, 12 (4 groups); summer, 1

GRADUATE SCHOOL OF BUSINESS

Willard Eugene Hotchkiss, Dean
Paul Terry Cherington, William Leonard Crum, George William Dowrie, Paul Eugene Holden, Jacob Hugh Jackson, Eliot Grinnell Mears, Edward Kellogg Strong, Jr., Professors
Boris Emmet, Acting Professor
†Victor H. Pelz, Associate Professor
Lillian Caroline Owen, Secretary

OBJECTIVES

The purpose of the University and of the business men who gave their support to the establishing of the Graduate School of Business was to set up a school in which selected men and women might be educated for business. This thought, as developed and clarified in the Conference on Business Education,[1] makes it the chief concern of the School along with preparation for immediate service after graduation, to develop habits of thought and action that will make for continuous growth in capacity for leadership.

Assuming the proper amount and quality of native ability and of achievement, educational and otherwise, up to the time of entering the School, the following are believed to be among the most essential objectives in the further training of the student who intends to make business a career:

1. An understanding of what business is and of the way it has come to occupy its present place in human affairs.
2. Knowledge and appreciation of the human and material forces with which business has to deal.
3. Mastery of basic principles of management.
4. Ability to use the tools and technical equipment through which business is administered and controlled.
5. Training in the application of principles in analyzing and handling concrete business situations.
6. Developing a capacity for decision and action based on intelligent analysis of essential facts.

A business executive, using the term in the only sense that is acceptable as an objective of university training, is a person who does important discretionary and directive work—work that is potentially creative. Such work requires today a range of knowledge and understanding that cannot be acquired without knowing the methods and processes of scientific analysis. Ability to locate facts and to sift the essential from the non-essential, the habit of basing action on a careful analysis of essential data, are qualities which it is peculiarly the province of a graduate school to develop.

† Absent on leave, 1928–29.

[1] Following the opening of the Graduate School of Business in October 1925, a conference of outstanding business men and educators was called in March 1926 to review the progress in business education and to consider the objectives toward which the new school should direct its work. The conference devoted three days to systematic discussion of these subjects.

The report of the conference, published by the University as *Stanford Business Series No. 1*, is believed to be a significant contribution to the literature of business and business education. Copies of the report may be had upon application to the Secretary of the Graduate School of Business.

At the same time, it must be recognized that analysis is sterile unless it leads to decision and action. Wise and timely action is of the essence of executive leadership. The School aims therefore constantly to confront the student with questions of business policy and procedure that call for positive action upon the facts which investigation brings to light.

UNITY OF MANAGEMENT

Business schools came into the system of higher education at a time when specialization in professional study was at its height. It was natural therefore for the scientific study of business to be directed largely toward the functional divisions of business—accounting, production, finance, marketing, advertising—rather than management as a whole. It is essential in the further study of business that especial emphasis be placed on management as a unifying and co-ordinating force.

Throughout its program of study the Graduate School of Business emphasizes the essential unity of management. Without neglecting the problems that arise in the several divisions of business, effort is made to develop such habits of mind that students instinctively will think of a business as a unit, and work out the solution of problems with the requirements of the whole business in mind.

INDIVIDUAL WORK

To the extent that seems desirable in order to economize time, students are brought together in classes or groups, but the work as far as possible is individual, and advancement depends on the capacity and the effort of the particular student. The course of study has been organized with a minimum of mechanics and regimentation. As far as possible principles of management are developed in connection with actual business situations in which the individual student is thrown on his own resources. Instruction in the School is addressed to selected graduate students, and it is expected therefore that their previous training will have prepared them to work under suitable supervision with a large degree of independence.

SUPERVISED FIELD WORK

It must be recognized that the university alone cannot supply that capstone of discipline—actually doing the job. A person who advances through successive positions in a going concern secures a kind of discipline which, though intangible, is nevertheless essential.

However clear the case may be for making business the subject of professional study, it is obvious that replacing apprenticeship with systematic schooling operates to postpone entry into business and to widen the gap between preparation and practice. The period of orientation, even for superior graduates of professional schools, is one of great difficulty and hazard.

In setting up a program for professional business training it appears worth while to provide some means by which a modicum of experience can be supplied before graduation. The student, therefore, spends part of his time during the course in supervised work either as an employee of a going business concern or in connection with some enterprise which requires the practical application of management principles. Completion of the course involves doing this supervised work in a manner acceptable both to the executives of the particular business and to the authorities of the School.

CONTACTS WITH BUSINESS

It is essential for schools of business to draw much of their material from the reservoirs of educational knowledge to be found in business itself. In order that these reservoirs may become accessible, it is important that the men who teach business in the universities work in close co-operation with responsible business men. The auspices under which the School was founded furnish a setting in the business community that is of great value in giving access to concrete problems which business men are handling.

With a student body definitely limited in numbers, it is feasible to establish for students intimate contacts with business enterprises and problems. We are fortunate in having a good start in the direction of needed contacts in respect to teaching material, to research, and to plant inspection.

Valuable data for teaching purposes have been placed at our disposal by various concerns engaged in manufacturing, selling, co-operative marketing, and management consulting service. Business enterprises in other parts of the country have already made notable contributions of case and problem material for use in other business schools. Pacific Coast firms have likewise begun to add their contribution to this fund of available teaching material.

Opportunities for faculty and student participation in projects involving economic research and analysis have been opened up through contact with business and industrial groups who have indicated their desire to submit some of their problems to the School for study.

The School is particularly fortunate in its relation to the California Economic Research Council. This council was organized through the initiative of the California Development Association for the purpose of eliminating duplication and waste, standardizing activities, strengthening primary sources of data, filling gaps in these sources, and establishing a central filing point for information concerning the various research activities being conducted in the state.

As an integral part of the program of the School, arrangements are made for students to inspect important industrial and commercial plants in the vicinity. Business concerns have shown unusual willingness to co-operate with the School in this respect. Plant visits are co-ordinated with work on the campus by requiring students to discuss, in written reports, typical business problems of each plant visited. Plants of the following firms were visited in 1928–29: Anglo-London Paris National Bank (bond department); California and Hawaiian Sugar Refining Corporation; California Mutual Building and Loan Association; Caterpillar Tractor Co.; The Emporium; Illinois Pacific Glass Corporation; John Bean Manufacturing Co.; Mutual Stores; Montgomery Ward & Co.; Oakland Airport; Pacific Coast Shredded Wheat Co.; Pacific Coast Steel Corporation; Pacific Gas & Electric Company; Pacific Portland Cement Company; Richmond, Chase Company; San Francisco Stock Exchange; Simmons Company of California, Inc.; Walsh, O'Connor & Company; Wells Fargo Bank & Union Trust Company; West Coast Porcelain Company.

PREPARATION AND ADMISSION

Persons who have completed a four-year course in an approved college or university may become candidates for admission.

College students who are looking forward to becoming candidates for admission to the Graduate School of Business are advised to direct under-

graduate study toward developing powers of accurate observation and correct habits of thought, both in respect to relatively exact data as found in the laboratory sciences and to the more contingent data of the several social sciences.

In considering the relative merit of applicants, more attention will be given to the quality of work done and to the evidence of promise shown during the student's undergraduate course, than to the particular subjects studied.

Applicants for admission must show ability to use correct and effective English.

Inquiries concerning the Graduate School of Business and requests for application forms should be addressed to the Secretary of the School.

The credentials required are: (1) Personal application for admission with graduate standing, including application fee of five dollars; (2) special application for admission to the Graduate School of Business; (3) official transcript of all college work completed including certificate of degrees received; (4) statements of personal qualifications on blanks furnished by the University.

Special regulations governing admission of women to the University make it necessary for women candidates for admission in October to file credentials by May 1.

[Students are strongly advised not to depend upon outside employment while here for any considerable part of their total expense. Experience has shown that full-time attention to the work of the School is necessary for the best results. It is much better to postpone entrance than to depend upon earnings while here.]

FEES

The Application Fee for all candidates for admission to the University, and for all registered students applying for admission to the Graduate Division, is $5, payable at the time of application.

The Tuition Fee for all students in the Graduate School of Business is $115 per quarter.

The Community Fee for all students is $13 per quarter. This fee covers the privileges of the gymnasiums, athletic grounds, hospitals, the Stanford Union or Women's Clubhouse, and membership in the Associated Students.

A diploma fee of $5 is charged all persons receiving degrees from the University, except those who have enrolled for the first time in the graduate or undergraduate divisions of the University since January 1, 1927.

DEGREES

Master of Business Administration

The degree, Master of Business Administration, will be conferred, upon the recommendation of the Committee on Graduate Study, when the student has satisfied the requirements laid down by the faculty of the Graduate School of Business.

Doctor of Philosophy

Students whom the faculty deem qualified to undertake independent, scientific research in business, and who are preparing for teaching or research positions, may become candidates for the degree, Doctor of Philosophy.

Candidates for this degree will conform to the general requirements as set forth in the *Information Bulletin.*

COURSE OF STUDY

Completion of the course in the Graduate School of Business will involve a minimum of two years' study, including the time spent in supervised field work. Students whose progress is sufficiently rapid to enable them to complete their work in the minimum time will thus be expected to spend six quarters in residence. The two-year program of study is organized under the following captions:

A. Analyzing business situations with regard to the basic human and material aspects which have a bearing upon business organizations and policies.
B. Considering management problems from the standpoint of a coordinated business unit. The first year's work under this heading will center around certain principles of organization and management which govern the proper structure and relationships of a business enterprise. The second year's work will be concerned with questions of general business policy.
C. Studying the chief functional or departmental fields into which business is divided for purposes of effective administration. Of these accounting and finance are given attention during the first year, while production and marketing are considered during the second year.
D. Specializing in a particular field.

FIRST-YEAR PROGRAM

Aspects of Management

As a means of assisting students to acquire a knowledge and appreciation of the human and material forces with which business has to deal, the first-year program will include the study of some of the major aspects of the background out of which modern business enterprises emerge, and in terms of which management must function. These aspects, which must be considered to a greater or less degree in handling business problems, are:

Economic (Business Economics, Business Statistics, Economic and Statistical Analysis): This section of the work affords training in the analysis of the economic factors which affect business policy and practice. An introductory treatment of the economic background of business develops the principles of economics with particular reference to their bearing upon the problems of management. The essentials of statistical method, as an analytical tool of management, are studied in a sequence of laboratory exercises which emphasize the use of numerical and graphic analysis in selected business problems. The student is then ready to enter upon a fuller examination of the economic aspects of management. He learns to consider the problems of business from the quantitative point of view, and to place them in a broad economic setting. He is taught to evaluate the significant economic elements in particular business situations, and to trace the relation of the important factors in general business and particular industrial conditions to costs, profits, and business stability.

Autumn and spring quarters (Crum, Dowrie) By arrangement
Autumn (Economics), 53, (Statistics), 53; spring (Economic and Statistical Analysis), 37

Geographical: A survey is made of major business problems from the geographical viewpoint. Underlying factors which receive consideration are agricultural production and marketing, timber supply, minerals, energy resources, water supply, fuels, climate, population, markets, transportation facilities, financial centers, labor supply, and the increasing distance between production and consumption areas. Emphasis is placed upon problems of agricultural and industrial development.

Winter quarter (MEARS) By arrangement
Winter, 41

Psychological: The solution of many business problems is dependent upon what others want and can or will do under certain conditions. The student is introduced, first, to some of the natural limitations of man as seen in learning and retention of skill and knowledge, and in fatigue from work, and also to the fact that human beings differ widely in every respect. Emphasis is placed not only upon information but also upon methods of ascertaining such information and of utilizing it in business. Second, consideration is given to the desires and aspirations of man which must be taken into account in adjusting human relations in business, particularly the relationship of the executive with his subordinates, his co-equals and superiors, and their relationship with customers, investors, and the general public. The psychology of selling and advertising, the determination of what others want and how to meet their demands, and methods of measuring the success of resulting business policies are studied.

Spring quarter (STRONG) By arrangement
Spring, 36

Scientific and Technical: Most major problems of management involve certain scientific and technical aspects. It is the purpose of this study to treat various engineering and cost-accounting phases of management with which the general executive should be familiar. The work in engineering deals with the simplest elements of mechanical drafting, machine design, important mechanisms, shop practices, metallurgy and heat treatment, material specifications, building construction, lighting, heating, ventilation, and power generation and transmission. In cost accounting the student studies the various elements of cost, the standard practices in the allocation of such costs to product or services produced, and the variety of the problems which confront the executive who desires to be well informed about the costs of his manufacturing operations. The work aims to give the student orientation in respect to the technical background of management and to develop a basis for sound co-operation between managers and technical experts.

Spring quarter (HOLDEN, JACKSON) By arrangement
Spring, 36

BUSINESS ORGANIZATION AND MANAGEMENT

The central management of a business has the task of knitting departments together and of keeping the business functioning as an organic whole. Management determines the common ends toward which effort shall be directed and maintains co-ordination between departments.

Study will be made of the way management is organized, of the way line, staff, departments, and functions in a highly organized business co-operate in making and executing decisions, and of the way authority is delegated and controlled. Attention will be given to the influence of historical and personal considerations in determining organization policy and procedure, especially in cases in which concerns are undergoing reorganization.

Emphasis will be placed upon the applications and limitations of standardization, upon means of preserving flexibility in an organization, and upon ways of making provision in the structure of a business for its orderly development and growth. Distinction throughout will be drawn between scientific and rule-of-thumb methods of dealing with organization problems. The aim will be to foster a habit of regarding business problems primarily from the viewpoint of general, as distinguished from divisional, management.

Autumn and winter quarters (EMMET) By arrangement
Autumn, 53; winter, 41

ACCOUNTING, FINANCIAL, AND LEGAL PROBLEMS OF MANAGEMENT

Because of their fundamental importance and universal usage, a fairly thorough study of accounting and finance is made during the first year; the work of the second year may thus be undertaken with a sound understanding of the relation of the financial and accounting activities to other major activities of an enterprise.

During the first quarter emphasis is laid upon the fundamental and universal principles that accountants must constantly use in their work. Such principles are also fundamental to the business manager who is to get the most out of the work of the accountant. The development of the bookkeeping mechanism, the principles of labor-saving devices and of accounting controls, and the preparation of statements of various kinds constitute the work. The aim of this section of the work is to develop accounting as a tool of analysis and control, rather than as a technical specialty.

The accounting problems considered include valuation and depreciation, the construction and interpretation of financial statements, stock control, systems of internal check, and budgetary control of financial and operating matters. Special accounting, financial, and legal problems with reference to reorganizations and other matters are also studied.

On the financial side, attention is given to the factors that determine financial policies, such as the amount of investment needed, character of security issues, requisite working capital, establishment and support of lines of credit, and dividend and investment policies.

An understanding of the legal aspects of management problems is essential if the business executive is to proceed wisely and safely in formulating and executing policy toward owners, customers, employees, and the public. Consideration is given, therefore, to basic legal concepts, principles governing legal responsibility for business transactions, unfair practices and restraint of trade, and fundamentals of public policy toward business.

Autumn, winter, and spring quarters (DOWRIE, JACKSON, TAYLOR) By arrangement
Autumn, 46; winter, 41; spring, 37

SECOND YEAR
TYPICAL SCHEDULE

Approximate allocation of time	Quarters in Residence		
	4	5	6
One-third	Marketing Problems, including merchandising and sales management		Business policy
One-third	Industrial management problems, including industrial relations and personnel		
One-third	Work in special field		

INDUSTRIAL MANAGEMENT PROBLEMS

The object of this work is to give a comprehensive picture of the entire field of industrial management with special emphasis on the application of the fundamental principles to the operation not only of factories but of offices, banks, hotels, and similar commercial enterprises. Such phases of the subject are covered as historical background, modern industrial tendencies, simplification and standardization, plant location, layout and maintenance, planning, stores and tool control, personnel, employee relations, rate setting and wage payments, classification and symbolization, and shipping and traffic.

Autumn and winter quarters (HOLDEN) By arrangement
Autumn, 14; winter, 14

MARKETING PROBLEMS

The marketing or selling activities of business constitute another major functional division of management. The purpose of this study is to survey prevailing methods of marketing as applied to manufactured products, industrial raw materials, and agricultural products, and to analyze the basic problems of business policy involved in the setting up and operation of marketing and merchandising organizations. Considerable time is devoted to the marketing problems relative to the Pacific Coast products, especially agricultural products, and to problems of international trade.

Autumn and winter quarters (CHERINGTON) By arrangement
Autumn, 16; winter, 13

BUSINESS POLICY

The growing complexity of modern business, even on a relatively small scale, has shown the essential unity of management problems, and the whole program of the School is designed to make clear the need for co-ordinating all fundamental activities of a business in terms of inclusive, consistent policy. Approximately two-thirds of the last quarter in residence, therefore, is devoted to unifying the chief results of previous study by considering problems of general policy which necessitate bringing different management factors within the scope of a unified policy. This work is largely individual, under the problem method, and as far as practicable is related to the work the individual student is doing in his specialized field of work.

Spring quarter (CHERINGTON and OTHERS) By arrangement
Spring, 11

Specialized Work

Substantially one-third of the student's time during the second year is available for specialization. Each student, after choosing his field of specialization, works under the personal supervision and direction of appropriate members of the faculty. Students are expected to carry on this special study with a large degree of independence, and with marked excellence. Comparative freedom is permitted in the selection of this work, which may be elected in one of the chief functional fields, or may be chosen so that it will cut across two or more of them. Subjects outside these fields may be selected when it seems feasible.

Autumn, winter, and spring quarters — By arrangement
Autumn, 12; winter, 11; spring, 10

The following paragraphs indicate the general character and range of the subjects available for specialized study:

Accounting: Advanced work in the principles and procedures of accounting is offered for those students who are interested in auditing and various accounting procedures from the standpoint either of the practicing public accountant or the treasurer, comptroller, or auditor in charge of the accounts of a commercial or industrial concern. The specific fields of accounting activity to be treated are determined largely by the needs of the students. Some of these major activities include: auditing, with special emphasis on the balance-sheet audit; investigations for refinancing, for the determination of profits, and for other purposes which are of primary importance to bankers and professional accountants; the devising and installation of cost and financial accounting systems; budgeting and organization for accounting control; and report writing and the preparation of statements and reports for the business executive. Actual problems from practice, setting forth the views of leaders in the profession, are made the basis of the year's work.
(Jackson)

Finance: Specialization in this field is directed chiefly toward the respective requirements of (1) the investment banker, (2) the so-called commercial banker, (3) the financial executive in an agricultural, commercial, or industrial enterprise. Cases for group discussion, as well as individual reading and investigation, have as their objectives a thorough comprehension of the scope of the calling and the attainment of proficiency in dealing with its problems. Such supplementary work is recommended as the plans of the individual students seem to require.
(Dowrie)

Industrial Management: Three lines of specialization are open to the student carrying on advanced work in Industrial Management: (1) He may elect to center his attention on one or more of the important phases of the subject, such as production control, plant engineering, purchasing, or office management; (2) he may concentrate on the various aspects of plant management in their specific application to some particular type of industry, e.g., food products, metal trades, woodworking, textiles, construction, and public utilities; (3) he may devote his efforts to an intensive study of some significant problem of factory operation as yet unexplored.
(Holden)

Marketing: Advanced work in this field consists primarily, as the student may elect, of intensive study (1) of the marketing problems and technique of particular types of enterprise, such as co-operatives, whole-

salers, department or other retail stores, manufacturers, or companies engaged in foreign trade; or (2) of the problems involved in the marketing of particular products; or (3) of specific problems in advertising or sales management.

(CHERINGTON)

Personnel: An opportunity is provided for students to develop a comprehensive understanding of personnel policy, after surveying the activities usually grouped under the heading of personnel work and considering the effect of various management policies upon human efficiency. Specific problems are assigned which necessitate use of those research methods which are applicable to this field. The objective is not merely to handle labor effectively, but to develop optimum human relationships within the entire business organization and between it and customers and the general public.

(STRONG)

SCHOOL OF EDUCATION

Ellwood Patterson Cubberley, Dean
Dorothy Putnam, Secretary
Hazel Bernice Dillon, Ada Jane Roberts, Assistant Secretaries
Margaret S. Wells, Librarian

The School of Education is one of the professional schools of the University, first organized by the Trustees of the University in 1917, and further organized in 1927. It has control of matters relating to the professional preparation of teachers and school officers within the University, and of the offering of elementary and advanced courses in Education. The School is at present organized into four divisions, as follows:

I. The Division of Graphic Art
II. The Division of Education
III. The Division of Educational Psychology
IV. The Division of Teacher Training

All courses or programs of study offered as a Teaching-Major or a Teaching-Minor by any department or school of the University, or any grouping of courses from different departments or schools intended to prepare students for teaching, also lie within the control of the School of Education.

The members of the faculty of the School of Education are listed under the different divisions.

LINES OF WORK OFFERED

The School of Education offers eight main lines of work:

1. Courses for the preparation of teachers of drawing for the public schools, and for the general training of college students in artistic perception and graphic expression. (See Division of Graphic Art, page 211.) Students may enroll as prospective majors in this division, beginning with the freshman year.

2. Courses of a general nature on the history, theory, function, financing, and administration of public education, intended in part as information courses for the general university student and without reference to the work of teaching. Course 130 is recommended as the first course for such students, and Courses 133, 165, 175, 180, 190, and 251 are suggested as further courses.

3. Courses intended to assist other departments in preparing their students for certification to teach in schools in California. All such students should confer with the Secretary of the School of Education as to courses, but Course 130 is required for all forms of teaching certificates of all candidates without teaching experience, and Courses 133 (or 165) and 180 are also recommended, if the candidate has not had experience in teaching. Candidates with teaching experience may make certain substitutions, and should consult members of the department as to desirable courses to include. Course 195 is required of all candidates for the junior high-school and for all forms of the secondary teacher's recommendation, under the regulations of the California State Board of Education, as are Courses 201 and 202, if the candidate has not had previous experience in teaching. Courses 201 and 202 also are required for all forms of California certificates. Teachers' methods

courses (204–224) are expected to be included when offered in the subjects which the student expects to be recommended to teach. (For a more detailed statement as to requirements for all types of California certificates, see the *Announcement of the School of Education.*)

4. An Upper Division course leading to the Bachelor's degree in Education (see page 215), and intended for those expecting to do further work in Education. Teachers of experience, and graduates of normal schools, teachers' colleges, and other teacher-training institutions, will be accepted as major students in Education when they have attained to at least junior standing. Others, lacking such experience or training, may be accepted as major students, each case being considered separately. For graduate work, experience in teaching is not a prerequisite.

5. Eight graduate curricula, each leading to the degree of Master of Arts in Education, and directed toward preparation for the following lines of professional service:

a) Secondary-school Teacher
b) Elementary-school Principal
c) Secondary-school Principal
d) School Supervisor
e) School Superintendent
f) School Counselor
g) Director of Research
h) Teacher of Education

(For an outline of each curriculum, see the *Announcement of the School of Education.*)

6. Advanced graduate work for major students who are candidates for the degree of Doctor of Education, and intended to give special preparation to: (a) those who desire to prepare for supervisory or administrative positions in the public schools, elementary or secondary, (b) those who desire to become teachers of Education in normal schools or colleges, and (c) those who desire to become master teachers in subject-matter lines in secondary schools, junior colleges, or colleges.

7. Advanced graduate work for major students in Education working either toward or without reference to the doctorate, as well as for students in other departments or schools desirous of making Education a minor for the degree of Doctor of Philosophy, and intended to give special preparation to: (a) those who desire to prepare to direct research work in training schools and public school systems, and (b) those who desire to become teachers of Education in normal schools or colleges and prefer the Ph.D. degree.

8. Courses and research work, given in connection with the Division of Educational Psychology and the Department of Psychology, in the psychology and pedagogy of exceptional children. Two lines of work are offered in this field: (a) elementary courses designed to give prospective superintendents and principals a general acquaintance with the problems of special education, and (b) research courses for the advanced student who looks forward to work as clinical psychologist in the public schools or institutions for defectives or delinquents. The Dr. C. Annette Buckel Foundation, supplemented by additional support from the Board of Trustees of the University, has provided for a "research fellowship in the

psychology and pedagogy of backward children." A "research fellowship in the study of exceptional children" has also been provided. (See Department of Psychology.)

LIBRARY AND PRACTICAL FACILITIES

The general University Library contains the important recent books, files of the more important educational magazines, both American and foreign, and a collection of early American educational magazines and reports. The special library of the School, consisting of about 10,800 volumes, contains one of the most complete collections of American state and city school reports to be found in the United States, the library ranking probably third in this respect. It is also rich in old college and normal school catalogues and textbooks, of much historical value. The collection of old and present-day school textbooks is also large and valuable.

In practical facilities the School of Education has good working connections with the State Teachers College at San Jose, and with the public schools of the immediate vicinity. For more important studies by advanced students the large city school systems in the vicinity of the University can usually be made available.

The School also has good working connections with the Department of Psychology, by means of which laboratory facilities for research are fully available to all who need them.

The following outline describes the courses that were offered during the academic year, 1928-29, by the different divisions of the School.

DEGREES OFFERED

Courses leading to the degrees of Bachelor of Arts and Master of Arts are offered under Divisions I, II, and III of the School of Education, and the degrees of Doctor of Education and Doctor of Philosophy under Divisions II and III. For the requirements for each degree see statements given under the divisions, or the *Announcement of the School of Education* for a more detailed statement.

FELLOWSHIPS

In 1919 a Teaching Fellowship in School Administration was founded by joint action of the Board of Trustees and Professor Cubberley, and in 1924 a second fellowship of the same type was created by similar joint action. Each fellowship pays $500, and these are ordinarily awarded only to those who have taken the Master's degree and are ready to proceed to the doctorate. The award is made in May of each year.

I. DIVISION OF GRAPHIC ART

Arthur Bridgman Clark, Professor and Executive Head
Chloe Lesley Starks, Associate Professor
Edward McNeil Farmer, Instructor

The work aims primarily to prepare students for positions as teachers of drawing and art in secondary schools. Many of the courses are also suitable for the practical and general cultural needs of students in other departments.

Intending teachers of art should register with the Division of Graphic Art as their major subject, and such may enroll as prospective majors in this division beginning with the freshman year.

REQUIREMENTS FOR DEGREES AND CERTIFICATES

Degree of Bachelor of Arts: Sixty units in Graphic Art. Intending teachers should also take enough work in Education, and in a teaching minor of some subject other than Graphic Art, to make possible the completion of the requirements for a high-school teacher's credential during one graduate year.

Intending Art majors should take 20 to 30 units of Art while in the the Lower Division as preparation for graduation in four years.

Junior High School Certificate: 60 units in Graphic Art, 27 units in Education, with a teaching major and minor.

Special Certification, Fine Arts Type: Secondary and Junior College Grade, 75 units in Graphic Art and 27 units in Education.

[See *Announcement of the School of Education* for requirements for all certificates. For the special lists of subjects required consult the secretary of the School of Education.]

Master's Degree, Including Secondary Teacher's Certificate: One graduate year including the following: 26 units, including thesis, in Graphic Art; enough units in Education to make the required 27 units; completion of the teaching major or minor (other than in Graphic Art).

COURSES OF INSTRUCTION

1. Still-life and Quad Sketching.—Fundamental principles in blocking, proportion, and light and shade. Subjects, still-life and out-of-door drawings of parts of the arcades of the University. The drawings are large (20″×25″), and done with charcoal and colored crayon. The aim of the course is to give readiness and reasonable accuracy in representation. Open to all students.

3 to 5 units, spring quarter (STARKS) MTWThF 1:05–4:05
Spring, 17

2. Freehand Constructive Drawing.—The development of a graphic vocabulary of objects, animals, and the human figure. Study is made of structure, action, three-dimensional form, foreshortening, and chiaroscuro. The practice is based on constructive methods to encourage drawing from memory and imagination and to stimulate observation when models are used. The course is designed to give purpose and power in graphic expression by giving the student sound theory and practice in graphic methods. Open to all students.

5 units, autumn and *spring quarters (FARMER) MTWThF 10
Autumn, 20; spring, 10

3. Design in Form and Color.—Great advance has been made in recent years in design, both in the development of rich color in surface decoration as applied to textiles and in interior decoration. To develop power in creative expression and color arrangement in prismatic as well as grayed colors, is the object of the course.

The work is done in tempera color with the brush directly, training in the most practical way habits of color analysis and clear thinking. A series of problems is given which begins with the color wheel and the simplest geometric form and leads on through easy steps to elaborate textile designs,

rich wall decorations, and the general color design of interiors. This course is prerequisite to Textiles, and Advanced Design. Open to all students.
5 units, winter, *spring, and *summer quarters (STARKS) Lec. MTWThF 8; Lab. hours at student's convenience
Winter, 18; spring, 10; summer, 7

4. Perspective.—A series of problems in form presentation; in part free-hand, in part drawn with instruments, and involving the various principles of perspective and shades and shadows. The latter part of the course involves drawings from actual buildings and placing figures in various distances and elevations. Open to all students and recommended as preparation to Course 5.
3 units, winter quarter (CLARK) TTh 10
3 units, *summer quarter (CLARK) MWF 10
Winter, 16; summer, 8

5. Art of House Design.—The course is a systematic study of the fundamental principles which underlie taste, convenience, and economy in house designing and furnishing. The principles and necessity of civic planning are also given brief consideration. The subject matter treated is of such universal interest and importance that the exercises assigned are kept well within the accomplishment of earnest students even though they may have had but little training in drawing. However, a great deal of drawing, both mechanical and free-hand, is required in the course as the most efficient means to the understanding of design in proportion, line, and surface, and sensitiveness to beauty of all kinds. The first half deals with types of exteriors and their design and plans; the second half with interior treatment, furniture, yard, and civic planning. A few trips of observation will be made in the suburban towns toward San Francisco. Previous experience in free-hand and perspective drawing will facilitate advancement in the course. Open to all students who have had one technical course such as 1, 2, 3, or 4, or the equivalent.
5 units, autumn and *summer quarters (CLARK) MTWThF 11
Autumn, 10; summer, 9

6. Lectures on Painters.—First half: The Renaissance from Giotto to Velasquez. Second half: The Nineteenth Century and Present Time. The course is conducted with the use of lantern slides, each student being furnished with a collection of prints selected from the University Prints Series, and blueprints prepared for this course. Open to all students.
5 units, autumn, *winter, and *summer quarters (CLARK) MTWThF 9
Autumn, 51; winter 31; summer, 37

7. Landscape.—Working outdoors in pencil, charcoal, and colored crayons. The chief work of the class is bent toward large 20″×25″ drawings in color, one being made each day, this developing power to think intently on the essential elements in design, of form, color value, and the selection of significant elements which make pictures. As a necessary accompaniment to the large drawings, each student carries a sketch book in which small notes of compositions are made. From discussions and selection of these the large subjects are chosen. Open to all students.
5 units, summer quarter (STARKS) [Not given in 1928–29]

8. Freehand Sketching.
1 unit, spring quarter (FARMER) By arrangement
Spring, 4

102. Advanced Free-hand Construction Drawing.—A course dealing with the subject matter of Course 2, for advanced students.
5 units, autumn and *spring quarters (FARMER) MTWThF 10
Autumn, 5; spring, 4

103. Advanced Color Design.—The continuation of Course 3.
5 units, winter, *spring, and *summer quarters (STARKS) MTWThF 8
Winter, 3; spring, 5; summer, 9

105. Advanced Course in Art of the House.—A more intensive study of house design, furniture design, and other furnishings than is possible in Course 5. Open to advanced students.
5 units, autumn and *summer quarters (CLARK) MTWThF 11
Autumn, 2; summer, 10

106. Advanced Course in History of Painting.
5 units, autumn and *summer quarters (CLARK) MTWThF 9
Autumn, 1; summer, 11

107. Advanced Landscape.
5 units, summer quarter (STARKS) MTWThF 1:05–4:05
Summer, 4

108. Advanced Freehand Sketching.
1 unit, spring quarter (FARMER) By arrangement
Spring, 11

110. Illustration.—Figure drawing and pictorial composition. The course aims to develop facility in strong, well-composed pictorial expression. Study is made of the relationship of compositional form to pictorial content and of the human figure as a subject of graphic expression. Drawing in charcoal and colored chalks. Prerequisite: Courses 1 and 2.
5 units, autumn and *spring quarters (FARMER) MTWThF 1:05–4:05
Autumn, 7; spring, 10

111. Posters and Lettering.—A study of Gothic, Roman, and modern letter styles and practice in executing them, both drafted and free-hand, with pen and brush. A study of poster composition with chief interest in effective line and color mass and the relation of compositional form to subject matter.
5 units, winter quarter (FARMER) MTWThF 1:05–4:05
Winter, 10

112. Handicrafts: Textiles.—The decoration of textiles in articles for personal use and interior decoration, block-printing, decoration of textiles by dyeing, embroidering, and batik. Open to all students who have had Course 3 or its equivalent.
5 units, winter quarter (STARKS) MTWThF 1:05–4:05
Winter, 5

115. Science Drawing.—A course designed to assist students in scientific illustration. It includes the drawing of simple scientific subjects in pen, outline, line and stipple shading, wash, line and wash. Especial attention is paid to the needs of individual students. Open to science and medical students on advice.
1 to 3 units, winter quarter (STARKS) 8–12 by arrangement
Winter, 5

116. Interior Decoration.—A short review of the history of interior architecture and decoration in Europe and America, with special reference to the cultural background of the times. A study is made of the development of the modern style in the domestic interior as an expression of modern thought and culture, and of the suitability of types of arrangement and decoration to modern social and esthetic needs. The course also includes practice in design and arrangement and the exercise of judgment in problems of decoration to develop appreciation of the principles of artistic composition.
5 units, winter and *spring quarters (FARMER) MTWThF 11
Winter, 21; spring, 1

200. Special and Seminar Courses.—Advanced work in connection with Courses 1 to 116 is arranged for graduate students in accordance with their technical needs.

For students working for the Master's degree weekly conferences are held for direction of work and reports.
5 units, autumn, winter, and summer quarters (CLARK)
Autumn, 2; winter, 2; summer, 6

203. Advanced Design.
5 units, spring quarter (STARKS) By arrangement
Spring, 1

206. Teachers' Course in Graphic Art.—For intending teachers of art; discussion of aims and methods of drawing and art instruction in the public schools. A study of the development of the artistic expression in the child in the fields of drawing, design crafts, and art appreciation. Theory and practice in organization of courses of study for the elementary and secondary schools. Open only to Upper Division students.
3 units, winter quarter (CLARK) MWF 10
3 units, *summer quarter (CLARK) TTh 10
Winter, 5; summer, 11

II. DIVISION OF EDUCATION

ELLWOOD PATTERSON CUBBERLEY, Professor and Executive Head
JOHN CONRAD ALMACK, †TRUMAN LEE KELLEY, WILLIAM MARTIN PROCTOR, JESSE BRUNDAGE SEARS, Professors
THOMAS WILLIAM MACQUARRIE (President, State Teachers College, San Jose), Acting Professor (Summer Quarter)
HAROLD R. BENJAMIN, PERCY ERWIN DAVIDSON, WALTER CROSBY EELLS, Associate Professors
WALTER LEWIS BACHRODT (Superintendent of City Schools, San Jose), WILLIAM FRANCIS REDDING (Head, Advisers' Department, Providence, R.I., Public Schools), Acting Associate Professors (Summer Quarter)
ARNOLD CLARENCE ARGO (Principal, Sequoia Union High School, Redwood City), WILLIAM GEORGE CARR (Assistant in Research, National Education Association, Washington), ROSCOE DAVID CASE (Superintendent of City Schools, Brush, Colorado), ALICE CECILIA COOPER (Head of English Department, Modesto Junior College), HARRISON FRENCH HEATH (State Teachers College, San Jose), LEONA HADLEY MCCULLY (Palo Alto Union High School), NANCY GERTRUDE MILLIGAN (Director of Elementary Education, Pasadena), CLARENCE ROBERT STONE (Author, Texts on Reading), Acting Assistant Professors (Summer Quarter)
REGINALD BELL, WILLIAM GEORGE CARR, FRED L. TIBBITTS, Teaching Fellows in School Administration
SUSAN L. DYER, VAAL STARK, Assistants in Girl Scout Work
FLORENCE C. BINGHAM, Lecturer (Summer Quarter)

REQUIREMENTS FOR DEGREES

Undergraduate Work.—Major students begin their work in Education with the junior year, and are expected to follow substantially the program of studies outlined below:

† Absent on leave, 1928–29.

Sophomore or Junior Year.—
Psychology 51. General Psychology (autumn, *winter, *summer) [5 units]

Junior Year.—Required courses, 13 units.
130. Introduction to Study of Education (autumn, *summer) 5 units
133. Principles of Education (winter) 5 units
190. Growth and Development of the Child (spring, *summer) 4 units

Senior Year.—Required courses, 12 units.
180. History of Education in America (autumn, *summer) 3 units
165. Educational Psychology (winter, *summer) 3 units
One of the following:
193. Principles of Elementary Education (spring)
195. Principles of Secondary Education (autumn, *spring, *summer) } 3 units
Total required courses in Education..... 23 units
Electives (any course in Division below 200)..... 12 units

Total undergraduate Education..... 35 units

It will be noted that in the above outline Practice Teaching and Methods Courses are not to be counted in the required 35 quarter units of Education.

In addition to the above, for graduation the student must also satisfy the requirements of two Teaching Minors in the School of Education and outside the department. In certain cases one teaching major will be accepted in place of the two teaching minors. If without experience in teaching, the student must also satisfy the Practice Teaching requirements.

Students coming with advanced or graduate standing from other universities may have substantially equivalent training accepted in lieu of the courses and the major and minor work required here.

First Graduate Year; A.M. Degree.—The requirements for the baccalaureate degree cover only introductions to Education, and those proposing to offer themselves for responsible positions in educational work will be expected to proceed at once to the Master's degree. For this at least forty-five units of advanced work and three quarters of residence will be required. In addition, the completion of all baccalaureate requirements, listed above, will be expected. Of the forty-five graduate units, at least thirty must be in courses in Education in advance of the baccalaureate requirements, together with the presentation of a satisfactory thesis.

The candidate will also be expected to satisfy the requirements for one of the eight special curricula listed on page 210. (For an outline of the requirements for each of these curricula see the *Announcement of the School of Education.*) Work listed below Course 175 will not be included, and ordinarily one-half of the thirty units must be work listed above Course 224. Courses passed with a grade of D ordinarily will not be accepted as satisfying requirements.

Candidates for the Master's degree must file an application, approved by the department, with the Registrar not later than the fourth week of the second quarter of study for the degree. Subsequent changes in the programs outlined also must be petitioned for.

The completion of the first year of graduate study should mean a somewhat general acquaintance with the different fields of Education, together with the beginnings of specialization in some one or two of these. Those who desire to prepare properly for the type of positions indicated under 6, 7, or 8, page 210, should proceed to one of the two types of doctorates offered.

Second Graduate Year.—Any student may do two or more years of graduate work in Education, following the same courses as degree candidates, but without becoming a candidate for either the Ed.D. or Ph.D. degrees. For many students this is the more satisfactory plan to follow.

For those students intending to proceed to an advanced degree, the work of the last two years is more specialized, and follows definite sequences. Seven main divisions of the field of Education are recognized for advanced graduate study, as follows: (1) History and Principles of Education, (2) General Theory of Education, (3) Administration and Supervision of Education, (4) Educational Statistics and Measurements, (5) Educational Psychology, (6) Elementary Education, and (7) Secondary Education.

Students intending to proceed to the degree of Doctor of Education either at once or later, must indicate three of the above fields as those in which they expect to specialize, and one of the three as the major line and the field of the thesis, together with an acceptable plan of work for the degree. By the close of the second year of graduate study, the candidate will be expected to demonstrate that he has attained to a mastery of the literature and practice in the three fields selected, and be ready for the General Examination given by the Faculty of the School of Education.

Students intending to proceed to the degree of Doctor of Philosophy, either at once or later, may select one of the above divisions as a Major and one, or two others combined, as a first Minor, and by the end of the second year of graduate study should also have completed in large part the required work in a second Minor, outside of the Department; should be able to satisfy the modern language requirements (German and French); should be well started on the dissertation; and should be ready for the University Oral Examination.

Third Graduate Year.—The third graduate year is devoted largely to completing any course requirements that remain, to personal investigation along the lines of the thesis subject, to putting the dissertation into final form, and to preparation for the final oral examination on the field of the thesis.

The thesis subject must be determined upon at the time of filing the petition for candidacy, in the case of the Ph.D. degree; for the Ed.D. degree the selection of the thesis subject may be postponed until the middle of the second year of graduate study. The subject chosen must be definite and of limited range, the method of investigation must be formulated and approved, and the final result, for the Ed.D. degree, "must establish the ability of the candidate either to make a contribution to knowledge in his special field, or to handle effectively the knowledge already available and produce a constructive result of importance and value," and for the Ph.D. degree the thesis must be "a contribution to knowledge, and the result of independent work." In each case the thesis must be satisfactory in organization and literary form.

Correspondence and Extension Courses.—The University offers no correspondence or extension courses, does not accept such courses as counting toward advanced degrees, and requires that all work for degrees must be registered residence work.

Advanced Degrees: The Doctorate.—The School of Education offers preparation, to properly prepared candidates, for two forms of the doctorate, as described below. Those desiring to become candidates for either type (A or B) of the Ed.D. degree, or for the Ph.D. degree with a Major in Education, will be expected to file a notice of such desire (Form J) with the Secretary of the School of Education not later than the beginning of the second graduate year. A formal application for candidacy (Form K)

made up after consultation with some member of the Faculty of the Division under which the candidate proposes to work, outlining plans for study and approved by such faculty member, should be filed with the Secretary of the School of Education not later than the beginning of the second quarter of the second year. The college aptitude test given by the University must have been taken before, or be taken at the time of filing the formal application (Form K). Students who can plan their program of study for either degree earlier than is indicated above, are advised to do so.

Following the completion of at least one quarter of resident study at the University and the filing of the formal application, a conference with the Faculty of the Division will be arranged. At this conference the applicant's entire record and proposed plans for work will be considered. He will be questioned as to his knowledge in the different fields of Education, and he may be asked to pass a written test, or to prepare a paper, or to discuss a problem as further evidence of his ability to do doctorate work. If accepted as a candidate for the degree, the faculty may then lay down conditions as to further preparation in Education, language requirements, additional subject-matter training, and collateral work outside the School and a faculty committee of three, representing the three fields chosen for special study, will be appointed to be in part responsible for his further advance toward the degree. The chairman of the committee will ordinarily represent the major or thesis line of work.

Whenever the candidate has substantially completed his approved preparatory study, together with any requirements laid down by the faculty at the time of the conference, the chairman of his special committee will request that a time be set for a comprehensive oral examination to test his proficiency. Written examinations in the special fields chosen will ordinarily precede admission to the oral examination. For the Ed.D. degree this examination is given by the faculty of the School of Education and is known as the General Examination; for the Ph.D. degree it is before a special committee of the faculty, appointed by the Dean of Graduate Study, and is known as the University Oral Examination. Each such examination is approximately three hours in length, and the candidate will be expected to show a comprehensive grasp of the subject-matter and literature in the fields chosen for study and the relation of these fields to other fields in Education. Evidence as to reading beyond the scope of the courses taken will be expected. The preparation in both major and minor subjects will be inquired into. The general or oral examination is supposed to come at the close of the second year of graduate study, or at the latest at the beginning of the third year.

The minimum residence requirement for either degree is three years (nine quarters) beyond the A.B. degree, of which at least the last year must be spent at Stanford University. Neither the time element nor the number of courses completed will be considered as acceptable unless the candidate also demonstrates a high degree of scholarship and the ability to do independent investigation and to carry through an original research in a highly creditable manner. Candidates lacking in the preliminary academic or professional preparation must expect to devote longer than the minimum time to the work. Evidence of broad general knowledge and training also is expected, as well as technical preparation in major and minor subjects.

The Doctor of Education (Ed.D.) Degree.—This degree is primarily a professional degree, and differs from the Ph.D. degree in that emphasis will

be placed on the mastery of professional subject matter rather than on original research; a reading knowledge of modern languages, except as noted under the B type, below, will be required only when needed for the student's thesis work; evidence as to at least two years of successful experience in classroom teaching or school administration, one of which must have been subsequent to the A.B. degree, will be required; and the thesis may be an organization or application of existing knowledge as well as a contribution. The degree is of two types, to meet the needs of two different classes of professional students, viz:

A. The School Administrator Type.

(Intended primarily for those who desire to become (1) teachers of Education in normal schools or colleges, and (2) supervisors and administrators in public school systems.)

B. The Master Teacher Type.

(Intended primarily for those who desire to become master teachers of subject matter in secondary schools, junior colleges, or colleges.)

The requirements as to preceding training, application, faculty approval, time, and proficiency, are the same for the two types, and are as previously stated. At least one course each in the General History of Education (182), Principles or Philosphy of Education (133, 175), Educational Psychology (165, 225), Educational Statistics (185), and the Administration of Education (250, 251) will be expected to be represented in all programs for both types of the degree. In addition, the following requirements have been set up:

The A Type Degree.—This is based on the A.B. and A.M. requirements in Education, as previously stated. Students coming from other universities must satisfy Stanford requirements in substance, though not necessarily taking the degrees, before proceeding further. Students who have taken the A.B. degree in other departments or schools of this or some other university may be permitted to complete deficiences in courses or by individual study, and certain substitutions of courses may be allowed.

The candidate, in addition to all professional requirements, must also satisfy the requirements of one Teaching-Major and one Teaching-Minor in the School of Education and in fields of study outside of Education proper. This should be largely done by the time of admission to candidacy, and must be completed before being admitted to the General Examination.

Each of the last two years of work must show the satisfactory completion of at least 45 units in advanced Education courses (above 222), except that as much as 15 units of the total may be required to be in collateral work outside of the School of Education, and as much as 25 units may be assigned to the thesis study.

The thesis must conform, in respect to form, time of submittal, and outline for publication, to the University requirements for the Ph.D. thesis. A satisfactory oral examination, of approximately one hour, will ordinarily be required on the field of the thesis, after its submission and approval, before recommending the candidate for the degree.

The B Type Degree.—The requirements for this type of the Ed.D. degree are, in all respects, the same as for the A type, except for the following:

A reading knowledge of one modern language will be required, to be evidenced before admission to the General Examination.

A Minor, in a field commonly taught in high schools or junior colleges,

will be required, and a total of 45 units of professional courses in Education will be waived that the candidate may devote this time to advanced subject-matter courses, and collateral work in the minor line of study. An acceptable program for the use of this time must be proposed by the student at the time he is admitted to candidacy. The minor field chosen will be stated on the diploma, and on the commencement program in conferring the degree.

Of the two years' teaching experience required, at least one year will be expected to have been subsequent to the A.B. degree and in the subject-matter field of the Minor.

The Doctor of Philosophy (Ph.D.) Degree.—This degree is primarily a research training degree, and is intended to give special training for (1) the direction of research work in training schools and public school systems, and (2) teaching Education in colleges and universities, where the candidate prefers the Ph.D. degree. Admission to candidacy rests with the Division or School concerned, but the Oral Examination, the approval of the thesis, and the thesis examination are under the control of the Committee on Graduate Study of the University. No teaching experience requirement is made for this degree.

For the degree with the Major in Education, one of the seven divisions of the field of Education listed on page 217 must be chosen as the major field and the field of the thesis investigation, and one, or two others combined, as a first minor. A second minor, outside the School of Education, also will be required. A test in the ability to read French and German and evidence as to proficiency in the major and minor fields, must be certified to before the candidate can be recommended for admission to the Oral Examination.

Students who desire to become candidates for the degree of Doctor of Philosophy with a Major or Minor in Education are urged to complete their requirements at as early an age as possible, preferably before thirty-five, and better still before thirty. It is contrary to the policy of the School to accept candidates for this degree with a Major or a Minor in Education who have passed the age of forty. Exceptions to this rule will be made only in the case of outstanding ability and superior academic training.

Requirements for a Ph.D. Minor.—Unless otherwise arranged, candidates for the Ph.D. degree in other departments or schools, who elect a Minor in Education, will be expected, in addition to offering evidence of practical experience in teaching, or school administration, to complete 45 units of work in Education in courses numbered above 174 (half of the work should be in courses listed above 222), and ordinarily to offer such courses along not more than three of the divisions of the field of Education given above, under the heading, *Second Graduate Year*, page 216. In addition, if not taken in course, the equivalent of Course 130 should be covered by independent study.

A. INTRODUCTORY COURSES IN EDUCATION

110. Girl Scout Training Course.—A course designed to interest and provide preliminary instruction to any student wishing information on leisure time programs for girls. The course is conducted using the Girl Scout troop organization plan and will include theory, as well as practical technique. Visits to Girl Scout troops and outdoor trips will be features of the course.

2 units, spring quarter (STARK) TTh 1:30–3
1½ units *summer quarter, first term (DYER) TTh 1:30–3
Spring, 16; summer, 10

112. Educational Aspects of the Parent-Teacher Movement.—This course deals with the various aspects of the work of parents and teachers as organized and functioning under the Congress of Parents and Teachers. It includes a study of the fundamental principles and aims of the organization; a summary of concrete examples of the fine service it is rendering in progressive educational centers; a discussion of legitimate fields of activity, working out certain projects in detail; a survey of co-operating agencies and the assistance that may be expected from these sources; actual demonstrations of how an association should be organized, a meeting conducted and program planned. Although primarily concerned with the operation of a Parent-Teacher Association, the course will be of value to teachers in their contacts with parents and in their relationship to the community in which they are located. There is considerable literature of practical value available, much of which is free.

2 units, summer quarter, first term (BINGHAM) MTThF 10
Summer, 1

130. Introduction to the Study of Education.—A general introduction to the field of education, giving a preliminary survey of the theories and general principles, and a study of typical phases of the organization and administration of public education, with a view to presenting such a body of information relating to the work of our public schools as the citizen and the teacher ought to have, and at the same time making the course an introduction to the various fields of education. Lectures, following a text, with assigned readings and reports. This course is required of all candidates for any form of California Teacher's Recommendation, and of all major students if without experience in teaching.

5 units, autumn quarter (EELLS) MTWThF 10
5 units, *summer quarter (CARR) MTWThF 8
Autumn, 115; summer, 26

133. Principles of Education.—A study of the biological and psychological principles underlying modern education, in connection with the demands of modern society in a complex social, economic, and scientific world, with the view to the formulation of a working philosophy for the educational process. Class discussion, following the study of a text, supplemented by relevant statistical data.

5 units, winter quarter (DAVIDSON) MTWThF 10
4 units, *summer quarter (DAVIDSON) MTThF 10
Winter, 56; summer, 12

140. Intellectual Education and School Reform.—Superstition, credulity, and irrational belief; propaganda; educational practice and policies for the cultivation of reflective thinking; intellectual motivation; interests: their nature, origin, and growth; the relation of interests and abilities, etc. The outstanding examples of school reform are considered.

5 units, spring quarter (DAVIDSON) MTWThF 11
Spring, 34

142. Education and Character.—A study of the significance for education of the psychology of character. Growth and character; types and individual differences; principles of training; educative agencies.

5 units, winter quarter (DAVIDSON) MTWThF 9
Winter, 45

160. Education for Citizenship.—An analysis of the ideals and habits essential for good citizenship, followed by a study of the part which each school subject and activity contributes to their development, the problem of civic education in the public schools, the place and work of the teacher in

preparing young people for citizenship, how to put the school on a civic basis, and the methods and materials that may advantageously be used in training for citizenship. A teachers' course in aims, methods, and materials, rather than a subject matter course in civics.

3 units, summer quarter, first term (CARR) MTWThF 10
Summer, 26

165. Educational Psychology.—A general elementary course, with emphasis on the psychological bases of teaching processes. Intended primarily for prospective teachers and undergraduate students. Lectures, readings, and reports. Prerequisite: Psychology 51, or its equivalent. Students who intend to take laboratory work in Psychology should begin with Psychology 55*a*, winter quarter.

3 units, winter quarter (BENJAMIN) MWF 8
3 units, *summer quarter (BENJAMIN) MWF 9
Winter, 77; summer, 34

172. Juvenile Problems in Education.—A study of the extent, causes, and prevention of juvenile delinquency, mental deficiency, and other social irregularities related to the work of the public schools and state institutions. Special attention is given to the recent juvenile research developments in California, and to the newer methods of dealing with exceptional children.

3 units (———) [Not given in 1928–29]

174. Rural Education.—A study of the social and economic factors involved in the development of rural institutional life; how these explain the present status of the larger administrative and supervisory problems of rural education; and the principles and practical methods essential to the solution of these problems.

2 units [Not given in 1928–29]

B. MORE ADVANCED COURSES

175. Educational Sociology.—The nature and function of Educational Sociology, and the application of principles developed to specific school problems. The individual and the group, the development of social personality, the school as a social institution, the home and the community, the state and education, education and social control, culture and progress, democracy and education; and the relation of these to school organization and administration, the teaching service, curricula, discipline, guidance, method, and the objectives of the school.

5 units, summer quarter (DAVIDSON) MTWThF 11
Summer, 30

180. History of Education in America.—A study of the evolution of American educational ideals and practices, with special reference to the origin and development of those features of our present-day practices which are most characteristically American. Lectures, following a text, assigned readings, and the investigation of an assigned topic.

3 units, autumn and *summer quarters (ALMACK) MWF 9
Autumn, 51; summer, 77

182s. History of Education.—A study of the evolution of our educational traditions and practices, beginning with the Greek and Roman periods, with the chief emphasis placed on the foundations that underlie and the forces that have produced our Western civilization, and have resulted in the creation of modern national school system. The chief emphasis is placed on origins and on the eighteenth- and nineteenth-century forces which have so profoundly modified life and education.

5 units, summer quarter (CUBBERLEY) MTWTh 4
Summer, 55

182a. History of Education.—Covers the same ground as 182s, but is intended primarily for graduate students and candidates for the Ed.D. degree working in part by individual study. The permission of the instructor should be obtained before registering by other than graduate students in Education.
5 units, autumn quarter (CUBBERLEY) TTh 4
Autumn, 23

184. Graphic Methods of Presenting Facts.—This course is designed to give practice in the methods which are serviceable in the popular portrayal of statistical data. In addition to graphic presentation, some attention is devoted to a consideration of the merits of various tabular arrangements of material and to desirable methods of school publicity. There are no prerequisites to the course, but a knowledge of lettering is desirable. Intended primarily to show prospective school officers how best to display statistical facts.
2 units, spring quarter (EELLS) TTh 9
Spring, 16

185. Elementary Statistical Methods.—A study is made of the various kinds of statistical series and the properties of each. The purpose of the first part of the course is to discover what constitutes the significant features of a body of data. Opportunity to obtain practice in the computation of the important constants of distributions is given; also in the use of calculating machines and other aids to computation. The approach is inductive, starting with measures and having as its object the discovery of the statistical resources which are available for making data reveal their story. Psychology 60 may be accepted instead of this course.
4 units, autumn and *summer quarters (EELLS) MTThF 8
Autumn, 42; summer, 62

186. Administration and Interpretation of Educational Tests and Measurements.—An introductory course dealing with the detailed problems of administration and scoring of Educational Tests and Scales and with the simpler problems of interpretation. No previous experience in education or mental measurements or statistical methods is presupposed. The first six weeks of the course is devoted to introductory theory. During the last four weeks the class divides, one division (S) dealing with secondary-school tests, and the other (E), at a different hour, with elementary-school tests.
4 units, winter quarter (EELLS) MTThF 11 (Elementary-test division at 10)
4 units, *summer quarter (MACQUARRIE)
MTThF 10 (Elementary-test division at 11)
Winter, 28; summer, 56

190. Growth and Development of the Child.—A study of the mental and physical growth and development of the school child, with special emphasis on physical development and the physical basis of education, the general laws of growth, physical defects, educational hygiene, the health of the school child, and preventive mental hygiene.
4 units, spring quarter (ALMACK) MTThF 9
3 units, *summer quarter, first term (MACQUARRIE) MTWThF 11
Spring, 70; summer, 80

193. Principles of Elementary Education.—The aim, work, function, and attainable goals of the elementary school as a part of the American system of education, and its specific problems in relation to the community and the other parts of the school system. An introductory course, intended for those without much acquaintance with elementary school work, and primarily designed to meet the State Board of Education requirement for the Elementary Certificate.
3 units, summer quarter (MILLIGAN) MWF 1
Summer, 14

195. Principles of Secondary Education.—A course dealing with the aims, purposes, and underlying principles of secondary education, intended for those preparing to teach in junior high and secondary schools, and required of all candidates for the California high-school recommendation. Detailed consideration is given to the current subdivisions of secondary education, such as the junior high school (under the 6-2-4 or the 6-3-3 plans); the three-year, four-year, and six-year high school; and also the junior college under the 6-3-3-2, the 6-2-4-2, and the 6-4-4 plans of operation. Open to seniors and graduate students only.

3 units, autumn and *spring quarters (BENJAMIN) MWF 8
3 units, *summer quarter, first term (BENJAMIN) MTWThF 8
Autumn, 46; spring, 76; summer, 56

C. TEACHER-TRAINING COURSES

201–224. These numbers are reserved for courses under Teacher Training, Division IV of the School of Education, page 233, which see.

D. ADVANCED COURSES

227. Silent and Oral Reading.—This course deals with the underlying science of reading; objectives of reading instruction, and principles of classification and method; specific aims, materials, and methods by periods in the elementary and secondary schools; plans for developing effective reading and study habits in other subjects; measurement, diagnosis, and remedial instruction. A practical course for teachers, principals, supervisors, and superintendents.

3 units, summer quarter, first term (STONE) MTWThF 9
Summer, 56

228. Investigations in Writing and Spelling.—This course consists of a review of significant scientific studies relating to writing and spelling with application to problems of materials and methods.

2 units, summer quarter, last four weeks (STONE) MTWThF 9
Summer, 19

229. Experimental Education.—This course is based upon the more important recent experiments relating to the elementary school subjects, methods of research are examined, and applications are made to teaching, supervision, curriculum construction, and research.

3 units, winter quarter (ALMACK) TTh 10
Winter, 36

230. High-School Administration.—Study of practical problems relating to the administration of a secondary school, such as organization, curricula, teaching staff, community relationships, part-time education, etc. A special problem is assigned for individual investigation by each student electing the course. Open only to seniors and graduate students who have had a minimum of fifteen units of work in Education, including Course 195, or who are teachers of satisfactory experience.

5 units, autumn quarter (PROCTOR) MTWThF 11
4 units, *summer quarter (ARGO) MTThF 11
Autumn, 27; summer, 40

231. The High-School Curriculum.—Principles of curriculum construction which underlie the efforts now being made to reorganize the secondary program of studies are considered in this course. Consideration is given to the experiments in curriculum building which have been carried out in Los

Angeles, Berkeley, and Oakland, California, as well as the Denver, Detroit, and other plans. Prerequisites: senior or graduate standing, and Course 195 or equivalent.

5 units, spring quarter (PROCTOR) MTWThF 9
4 units, *summer quarter (REDDING) MTWTh 1
Spring, 38; summer, 55

232. Seminar in Problems of High-School Administration.—An intensive study of some of the leading present-day problems. An opportunity will be afforded students to select problems of special interest.

2 units, summer quarter (REDDING) TTh 2
Summer, 8

233. Extra-Curricular Activities in High Schools.—Student participation in school government, athletic associations, honor societies, glee clubs, social and scientific clubs, school publications, and such supplementary school agencies as Boy and Girl Scouts, Junior Chamber of Commerce, Hi-Y, and Junior Red Cross, are considered. The course should be of interest to high-school principals, vice-principals, and deans of boys and girls, as well as to high-school teachers preparing for the work of school counselors. Course 195, with some other work in Education, a prerequisite.

2 units, spring quarter (PROCTOR) Th 1–3
4 units, *summer quarter (ARGO) MTThF 10
Spring, 30; summer, 77

234. Educational and Vocational Guidance.—The general principles of educational and vocational guidance are taken up during the first part of the quarter. The relation of guidance to the different phases of education work—social, civic, moral, aesthetic, and vocational—are considered. During the latter part of the quarter methods employed in counseling are investigated, and problems are assigned which require case studies and personal investigation of situations existing in nearby high schools. Prerequisites: Course 195 or equivalent, graduate standing, or teaching experience and senior standing.

5 units, winter quarter (PROCTOR) MTWThF 11
3 units, summer quarter (REDDING) MWF 2
Winter, 33; summer, 49

236. Problems and Procedure for Deans and Advisers of Girls.—A course for experienced teachers, administrators, deans and advisers of girls, and for graduate students who expect to take up work as dean and adviser of girls. Course deals with duties of dean, such problems of advisership as health, educational and vocational guidance, recreation, morals and religion; case work, social activities, office equipment and technique, and community relationships.

3 units, summer quarter [Not given in 1928–29]

237. Adult Education.—Seminar on development of agencies which provide educational opportunities for adults. Involves a study of the history, aims, and purposes of the agencies which provide educational opportunities for adults in America and Europe. The philosophy, methods of teaching, sources of support, and administration of adult education are investigated.

2 units, autumn quarter (PROCTOR) Th 1–3
Autumn, 21

238. Secondary Education Problems.—A seminar course which involves a critical examination of the outstanding problems in the field of secondary education. Current literature is examined, and methods of research applicable to the solution of these problems are investigated. Oral and written reports on selected problems are required. Prerequisites: Courses 195 and 230, or equivalents.

2 units, winter quarter (PROCTOR) TTh 1–3
Winter, 11

240. Advanced Statistical Methods, I.—This course is a continuation of 185, and deals primarily with series of related measures. The statistical methods of analysis of correlated data and the means of combining several measures into total scores are treated. Education 185, Psychology 60, or other equivalent course is a prerequisite.

4 units, winter quarter (Eells) MTThF 8
4 units, *summer quarter (Eells) MTThF 10
Winter 22; summer, 8

241. Advanced Statistical Methods, II.—This is a continuation of Education 240. It deals especially with problems in multiple correlation and with the statistical treatment of known linear, skew, and categorical data. Education 240 is prerequisite. Course alternates with 315.

4 units, spring quarter [Not given in 1928–29]

244. Interpretation and Construction of Mental and Educational Tests and Measurements.—This is a continuation of Course 186, dealing in the main with the interpretation of test scores in a diagnostic manner. Methods for the utilization of various measures in educational and vocational guidance programs are indicated. Some attention is given to the methods of construction of educational tests. Courses 185, 186, and 189, or equivalents, are presupposed.

4 units, spring quarter (Eells) MTThF 10
Spring, 9

248. Education and Character: Advanced.—A continuation of Courses 140 and 142. Open to students who have had either of these courses, or the equivalent.

3 to 5 units, spring quarter (Davidson) F 1–3
Spring, 13

250. State School Administration.—A study of the educational principles underlying the proper administration of school systems in states and counties, and involving a comparative study of the school systems of the various American States. The course includes a study of such topics as federal and state policy, forms of control, scope of the school system maintained, revenue and apportionment, the state and the teacher, the state and the child, private and sectarian education, and state oversight and control. This course as stated carries four units. An additional unit of credit may be had by carrying a parallel study of the California School System, and by this means answering the state requirement of such a course for the administration credential.

4 or 5 units, spring quarter (Cubberley) MTThF 3
4 or 5 units, *summer quarter (Cubberley) MTWTh 3
Spring, 34; summer, 91

251. City School Administration.—A study of the educational, financial, and administrative principles underlying the proper organization, administration, and supervision of school systems in cities, with a view to the establishment of principles of action. A thesis on some problem in city school organization or administration, or a survey of some city school system, required of each autumn quarter student.

4 units, autumn quarter (Cubberley) MTThF 3
4 units, *summer quarter (Bachrodt) MTThF 8
Autumn, 29; summer, 73

254. The Principal and His School.—A practical course, dealing with the organization and administration of a single school, the organization and supervision of instruction, school extension, community relationships, etc. Thesis on some administrative problem required of each student.

4 units, autumn quarter (Almack) MTThF 10
4 units, *summer quarter (Bachrodt) MTThF 10
Autumn, 24; summer, 32

255. Administrative Problems for the Teacher.—A study of the problems of organization, administration, and supervision of school systems from the angle of the teacher concerned, rather than from that of the superintendent. Intended primarily for classroom teachers, elementary or secondary.
3 units, summer quarter, first term (CASE) MTWThF 3
Summer, 27

256. Organization and Supervision of Instruction.—A study of the principles underlying the organization and supervision of classroom instruction, the art and technique of schoolroom supervision, the supervision of schoolroom instruction in the different school subjects, and means for improving teaching technique and the estimating of teaching efficiency. For present and prospective principals, superintendents, and special supervisors. Experience or special preliminary training a prerequisite.
4 units, summer quarter (STONE) MTThF 11
Summer, 36

257. The Platoon School.—A detailed study of the organization, operation, administration, work, cost, advantages, and disadvantages of the platoon type of school. The purpose of the course is to familiarize the student with the working of a platoon type of school.
3 units, summer quarter, first term (CASE) MTWThF 4
Summer, 17

260. The Elementary Curriculum.—Actual curriculum problems are presented from the field and a possible plan of procedure for their solution developed under the guidance of this course. The principles which underlie curriculum building, the outstanding literature in the field, and possible plans of procedure will be considered. A study of the objectives of education as guided by individual and social needs, and the activities which contribute to the achievement of the objectives are studied. Consideration is given to the subject matter of the various grade levels and to the classroom laboratory possibilities of developing enriched curriculum content.
3 units, summer quarter (MILLIGAN) MWF 2
Summer, 31

262. Organization and Supervision of Elementary Education.—A course dealing with the more important problems of organization, management, and supervision of the elementary school, including such topics as grade, departmental, group, and individual systems of class organization; typical promotion schemes; program making; time allotment; grades and marks; records and reports; attendance and retardation.
4 units, spring quarter (SEARS) MTWTh 2
Spring, 20

263. Special Studies in Elementary Curriculum.—Individual studies of the elementary school curriculum problems, with seminar reports.
2 units, summer quarter (MILLIGAN) T 1–3
Summer, 11

265. School Surveys and Educational Diagnosis.—A study of the literature relating to school surveys and to the methods and technique essential to the investigation of the major problems of the school administrator. How to organize and conduct a school survey, how to determine the lines of investigation needed, how to collect and interpret data, and how to set forth the results of the investigation in a report will be important features of the course.
4 units, winter quarter (SEARS) MTWTh 1
Winter, 28

267. Business Management of City School Systems.—A study of the organization and of the processes of managing the business affairs connected with the development, operation, and maintenance of physical properties, and with the financial accounting for city school systems.

4 units, summer quarter (SEARS) MTWTh 1
Summer, 33

269. School Buildings and Building Programs.—A study of the fundamental problems involved in schoolhouse planning and construction, including standards of construction, unit cost, types of buildings, janitor service, and building surveys.

4 units, winter quarter (ALMACK) MTThF 9
4 units, *summer quarter (ALMACK) MTThF 8
Winter, 21; summer, 26

270. Public School Finance.—A course on the financing of public education in the United States dealing with the main problems of expenditures, the cost of schools, education as an economic burden, revenues and their control, indebtedness, budget-making, accounting, costing service, and financial reporting.

4 units, spring quarter (SEARS) MTWTh 1
Spring, 17

275. Practical Administrative Problems.—A study and discussion of a number of practical problems in the organization and administration of a system of public instruction in cities. Limited to advanced students who have had Courses 250, 251, and 254, or their equivalents, and administrative experience.

3 units (CUBBERLEY) [Not given in 1928–29]

280. Current Problems in Public Education.—A seminar type study and discussion of current problems in the organization and administration of public education in cities.

2 units (CUBBERLEY) [Not given in 1928–29]

285. The Junior College.—A study of the development, organization, and administration of the Junior College. Attention will be directed to the functions of the public junior college and its place in educational reorganization. Designed for prospective junior college teachers and administrators. Graduate students only admitted.

3 units, spring and *summer quarter (EELLS) MWF 9
Spring, 21; summer, 38

290. Introduction to Thesis Work.—All students registering as candidates for the degree of Master of Arts are expected to spend one quarter in thesis training, where instruction in finding materials, bibliography, thesis organization, etc., is given, and the student guided to the selection and work on a problem.

1 unit, autumn quarter (ALMACK) W 10
1 unit, Section I, summer quarter (ALMACK) W 8
1 unit, Section II, summer quarter (BENJAMIN) W 10
Autumn 31; summer, 100 (2 sections)

295. Education Journal Club.—All graduate students in Education are expected to include registration in this course as a part of their graduate program. The course includes an acquaintance with magazine and monograph literature, European as well as American, with reports and discussion of the more important current material.

1 unit, autumn quarter (BENJAMIN, EELLS) T 7:30–10 P.M.
1 unit, summer quarter (BENJAMIN) T 7:30–10 P.M.
Autumn, 42 (2 sections); summer, 8

300. Seminar in Social Problems.—Devoted to a study of problems in character study and character training, and to certain sociological aspects of public education. Theme for the quarter: School Reform. Open by permission.
3 to 5 units, summer quarter (DAVIDSON) F 2–4
Summer, 35

302. Seminar on Elementary School Curriculum.
2 units, winter quarter (ALMACK) T 7:30–10 P.M.
Winter, 18

305. Seminar in Public School Finance.—Open to students of administration who are equipped to carry on investigation within this field.
3 to 5 units (SEARS) [Not given in 1928–29]

306. Seminar in Administrative Problems of City Superintendent.—A practical study of the administrative program in medium-sized city school systems. For advanced students who have had a general course in the principles of school administration (251) and supervisory experience. Special assignment to each student of a problem for individual investigation and term report.
2 units, spring quarter (CUBBERLEY) TTh 4
Spring, 12

307. Seminar in Administrative Problems.—Emphasis will be placed during 1928-29 on the development and extension of the methods and technique of the school survey. The needs of state, county, and city school superintendents for norms, standards, and exact methods of investigation in their work will furnish the basis for the selection of individual problems.
4 units, winter and *summer quarters (SEARS) MTWTh 2
Winter, 6; summer, 11

315. Psychometry.—Essentially a research course. Attention is given to the analysis of mentality; to the measurement of interest; of special sensory capacity; and of certain specific habits and skills. The bearing upon problems of guidance is stressed. Education 240 and 244, or equivalents, are prerequisites. Course alternates with 241.
4 units (KELLEY) [Not given in 1928–29]

320. Principles of Research. A seminar in scientific method and the underlying principles of research. A brief period will be given to forming an acquaintance with outstanding examples of the general literature of scientific method, to be followed by reports on original studies made by members of the class. Open to second-year graduate students, after consultation with the instructor, who desire to become candidates for the Ed.D. and Ph.D. degrees in Education.
2 units, summer quarter (ALMACK) TTh 10
Summer, 27

325. The Thesis for the Doctorate.—Students in Education or other departments working upon Ph.D. dissertations, and students in Education working upon Ed.D. dissertations, who desire assistance in connection with the definition and handling of their problems may enroll in this course, upon approval of the instructor. The work is individual and adapted to the student's special problems. Each student is called upon to make a report each quarter upon the progress of his investigation. This course is intended for the special help of Ph.D. or Ed.D. students in Education, or Ph.D. students in other departments, whose theses involve statistical procedure, and is not intended to take the place of registration for research work with

individual professors. Education students should register for their thesis work under the instructors and courses listed below.

2 units, winter and *spring quarters (ALMACK) W 9–11
Winter, 13; spring, 11

330–40. Special Thesis Courses.—In addition to the courses listed above, special work in independent investigation is provided for students prepared to do such advanced work, the nature of the investigation being determined by the student's preparation and needs. Permission to register for any of the following special courses, and the number of units of credit to be given, are subject to individual arrangement. In signing up for any one of the following courses, the proper number and name of instructor should be put on study cards. Meetings of the different groups are arranged for from time to time, usually in the evenings, for reports as to progress, discussion, and criticism.

The members of the instructing staff stand ready to supervise independent investigations in the following fields:

330. Problems in the history of education. (ALMACK, CUBBERLEY)

331. Problems in the theory of education. (DAVIDSON)

332. Problems in the organization and administration of rural and county-unit education. (ALMACK, CUBBERLEY)

333. Problems in the organization and administration of elementary education. (ALMACK, SEARS)

334. Problems in the organization and administration of secondary education and vocational education and guidance. (BENJAMIN, PROCTOR)

335. Problems in state, county, and city school organization and administration. (ALMACK, CUBBERLEY, SEARS)

336. Problems in school finance and business management. (SEARS)

337. Problems relating to the school plant. (ALMACK)

338. Problems relating to educational tests, measurements, and statistical procedures. (EELLS)

339. Problems in intelligence testing and educational psychology. (MERRILL, TERMAN)

340. Problems in junior college administration. (EELLS, PROCTOR)
Autumn, 17 (8 groups); winter, 29 (6 groups); spring, 63 (7 groups); summer, 67 (6 groups)

III. DIVISION OF EDUCATIONAL PSYCHOLOGY

LEWIS MADISON TERMAN, Professor and Executive Head
JOHN CONRAD ALMACK, †TRUMAN LEE KELLEY, Professors
HAROLD R. BENJAMIN, WALTER CROSBY EELLS, †CALVIN PERRY STONE, Associate Professors
MAUD AMANDA MERRILL, Assistant Professor

This division includes the courses in educational psychology, mental testing, and closely related lines. Students working in this division may register under and receive degrees from either the School of Education or the Department of Psychology, the requirements for degrees being as stated under each of these headings.

† Absent on leave, 1928–29.

COURSES OF INSTRUCTION

165. Educational Psychology.—A general elementary course, with emphasis on the psychological bases of teaching processes. Intended primarily for prospective teachers and undergraduate students. Lectures, readings, and reports. Prerequisite: Psychology 51, or its equivalent. Students who intend to take laboratory work in Psychology should begin with Psychology 55*a*, winter quarter.

3 units, winter quarter (BENJAMIN) MWF 8
3 units, *summer quarter (BENJAMIN) MWF 9
Winter, 77; summer, 34

170. Mental Deficiency and Delinquency.—A study of mental retardation and its relation to delinquency. Mental traits of the feeble-minded; heredity; classification; psychological diagnosis. Prerequisite: Psychology 51.

3 units (MERRILL) [Not given in 1928–29]

173. Psychology and Treatment of Exceptional Children.—A study of bright and dull children. Prerequisite: Psychology 51.

3 units (MERRILL) [Not given in 1928–29]

188. Mental Tests.—An introductory course dealing with the principles and applications of intelligence tests and of methods of testing personality and character traits. Lectures and demonstrations. Prerequisite: Psychology 51. A course in statistical method must accompany or precede.

5 units, summer quarter (MERRILL) MTWThF 11
Summer, 23

189. Intelligence Tests.—An introductory course, dealing with the technique of intelligence testing, with emphasis on Binet procedure. Prerequisites: Psychology 51, and either Psychology 60 or Education 185.

4 units, winter quarter (MERRILL) MTWTh 11
Winter, 15

225. Educational Psychology: Advanced.—Original endowment, mental development, individual differences in relation to heredity, sex, and environment; learning, formal discipline, work, and fatigue, with special reference to the school program. Independent study, discussions, and class reports. Prerequisites: Psychology 51, 55 or 165, and 60 or 185.

3 units, autumn and winter quarters (TERMAN) MWF 11
Autumn, 14; winter, 14

240. Advanced Statistical Methods, I.—This is a continuation of Course 185 and deals primarily with series of related measures. The statistical methods of analysis of correlated data and the means of combining several measures into total scores are treated, with particular application to educational and mental test data and problems. Education 185, or Psychology 60, is a prerequisite.

4 units, winter quarter (EELLS) MTThF 8
4 units, *summer quarter (EELLS) MTThF 10
Winter, 22; summer, 8

241. Advanced Statistical Methods, II.—This course is a continuation of Education 240. It deals especially with problems in multiple correlation and with the statistical treatment of known linear, skew, and categorical data. Education 240 is a prerequisite. Course alternates with 240.

4 units [Not given in 1928–29]

244. Interpretation and Construction of Educational Tests and Measurements.—This is a continuation of Courses 186 and 187, dealing in the main with the interpretation of test scores in a diagnostic manner. Methods for the utilization of various measures in educational and vocational

guidance programs are indicated. Some attention is given to the methods of construction of educational tests. Courses 185, 186, and 189, or equivalents are presupposed.

4 units, spring quarter (EELLS) MTThF 10
Spring, 9

245. Mental Test Practice.—The selection and use of mental tests, with laboratory practice and field work. Important types of tests are subjected to experiment and critically evaluated. Prerequisites: Psychology 60, 188, or 189, and one laboratory course.

4 units, spring quarter (MERRILL) MTWTh 1–3
Spring, 8

309. Seminar.—Research reports and current literature in educational psychology and mental tests.

1 unit, autumn, winter, and spring quarters (TERMAN) W 7:30–10 P.M.
Autumn, 9; winter, 12; spring, 11

310. Seminar in School Classification.—Problems in the grading and classification of school children. Prerequisites: Courses 185 (or Psychology 60), and 188 or 189.

2 units (TERMAN, ———) [Not given in 1928–29]

312. Mental Development.—Seminar and problem course. A critical survey of the most important studies of infancy, childhood, adolescence, and senescence. Intended primarily for major students in Psychology and Education who are in the second or third year of graduate work. Alternates with Course 313.

3 units (TERMAN) [Not given in 1928–29]

313. Psychology of Endowment.—A seminar and thesis course. Tests of general intelligence, special abilities, character and personality; the psychology of genius; mental inheritance; race differences, etc. Intended for same class of students, and alternates with 312.

2 units, autumn, winter, and spring quarters (TERMAN) TTh 11
Autumn, 6; winter, 10; spring, 8

314. Mental Test Problems.—For qualified students who wish to undertake an experimental problem of limited scope.

2 or 3 units, spring quarter (TERMAN, MERRILL) By arrangement
Spring, 1

315. Psychometry.—Essentially a research course. Attention is given to the analysis of mentality; to the measurement of interest; of special sensory capacity; and of certain specific habits and skills. The bearing upon problems of guidance is stressed. Education 240 and 244, or equivalents, are presupposed. Course alternates with 241.

4 units (KELLEY) [Not given in 1928–29]

325. Training in the Doctor's Dissertation.—Students in Education or other departments working upon Ph.D. dissertations, and students in Education working upon Ed.D. dissertations, who desire assistance in connection with the definition and handling of their problems may enroll in this course, upon approval of the instructor. The work is individual and adapted to the student's special problems. Each student is called upon to make a report each quarter upon the progress of his investigation. This course is intended for the special help of Ph.D. or Ed.D. students in Education, or Ph.D. students in other departments whose theses involve statistical procedure, and is not intended to take the place of registration for research work with individual professors. Education students should register for their thesis work under Courses 330–40.

2 units, winter and *spring quarters (ALMACK) W 9–11
Winter, 13; spring, 11

IV. DIVISION OF TEACHER TRAINING

WILLIAM MARTIN PROCTOR, Professor and Executive Head
LEE EMERSON BASSETT, ARTHUR BRIDGMAN CLARK, WILLIAM ALPHA COOPER, EVERETT WALLACE SMITH, Professors
JOSEPH GRANT BROWN, ERNEST WHITNEY MARTIN, Associate Professors
HAROLD R. BENJAMIN, Associate Professor, and Director of Practice Teaching
SOPHIA CRAMER, LINA JACOB GUERRERO, HARRISON FRENCH HEATH, LEONA HADLEY MCCULLY, RUTH PRESTON, Assistants in Instruction, Teachers' Methods Courses

The following Teachers' Courses are offered for the better preparation of prospective teachers in teaching technique, and a Teachers' Course should be added to each Teaching Major or Teaching Minor when offered in the subject or line of work in which the student is preparing. The maximum counting value toward the Education requirements for the High-School Teacher's Recommendation for all such courses, as provided by the rules of the California State Board of Education, is three units.

A. MANAGEMENT AND PRACTICE

201. Methods and Management of Instruction.—A practical course in the methods and management of secondary instruction. The psychology of the high-school subjects will be considered, and opportunity for directed observation of expert secondary instruction will be given. This course is intended to be a preparation for practice teaching, and should be taken before Course 202.

2 units, autumn and *spring quarters (BENJAMIN) TTh 8
Autumn, 46; spring, 51

202. Practice Teaching.—Practice in the handling of classes and the giving of instruction, with accompanying conferences, six units of credit in such work being required of all inexperienced teachers, by the rules of the State Board of Education, for a California High School Teacher's Recommendation. Those who desire to enroll for practice teaching should secure a blank form of application for a practice-teaching position from Professor Benjamin, and fill out and file the same during the quarter preceding the one in which they desire to fulfill their practice-teaching requirement. Prospective cadet teachers should confer in advance with Professor Benjamin. Conference with all practice teachers required each week. Prerequisites: six to ten units of work in Education, including Courses 195 and 210 for secondary school teaching, together with graduate standing. A teachers' course in a major or a minor subject (Courses 203–222) should be taken at approximately the same time. For good reason, with permission, seniors may be admitted to the work.

Students must register in Practice Teaching in the autumn and winter quarters, or in the winter and spring quarters, as the work covers a semester and must be carried through two quarters. New students are not accepted at the beginning of the spring quarter.

3 units, autumn, *winter, *spring, and *summer quarters (BENJAMIN)
Conference M 4:05 5
Autumn 39; winter, 84 (2 sections); spring, 54; summer, 1

B. TEACHERS' METHODS COURSES

These courses are intended for students preparing to teach special subjects in the secondary schools, and are offered in connection with the practice

teaching work to students preparing in the teaching majors and minors, as described in the *Announcement of the School of Education.* These courses are required, if offered in connection with the major and minor subjects in which preparation is made, and are supposed to precede or parallel the practice teaching.

203. Teachers' Course in Biology.

[Not given in 1928–29]

204. Teachers' Course in Chemistry.

[Not given in 1928–29]

206. Teachers' Course in Graphic Art.—For intending teachers of art; discussion of aims and methods of drawing and art instruction in the public schools. A study of the development of the artistic expression in the child in the fields of drawing, design, crafts, and art appreciation. Theory and practice in organization of courses of study for the elementary and secondary schools. Open only to Upper Division students.

3 units, winter and *summer quarters (Clark) MWF 10
Winter, 5; summer, 11

207. Teachers' Course in Social Studies.—A study of the problems involved in the teaching of the social studies including history, citizenship, geography, economics, and social problems in the junior and senior high school. The course considers the scope and unity of this field; educational objectives; organization of subject-matter for teaching; and methods of classroom procedure.

3 units, summer quarter, first term (McCully) MTWThF 11
Summer, 41

208. Teachers' Course in English.

2 units, winter quarter (Preston) TTh 4
3 units, summer quarter, first term (Cooper) MTWThF 2
Winter, 18; summer, 29

209. Teachers' Course in French.

2 units, autumn quarter (Cramer) TTh 4
Autumn, 10

210. Teachers' Course in Modern Languages.

3 units, summer quarter [Not given in 1928–29]

211. Teachers' Course in General Science.

[Not given in 1928–29]

[**Teachers' Course in German.**—See Germanic Languages 200.]

[**Teachers' Course in Greek.**—See Classical Literature A200.]

214. Teachers' Course in History.

2 units, autumn quarter (McCully) WF 4
Autumn, 35

215. Teachers' Course in Journalism.—A course for those preparing to become teachers of journalistic writing in secondary schools, and for those preparing to supervise student publications in such schools.

2 units, spring quarter (Smith) By arrangement
2 units, *summer quarter (Smith) TTh 3
Spring, 6; summer, 6

[**Teachers' Course in Latin.**—See Classical Literature B200.]

217. Teachers' Course in Oral Expression.—A course in problems and methods of teaching the several branches of oral expression in the secondary schools.

2 units, winter and *spring quarters (Bassett) Th 2–4
Winter, 1; spring, 21

219. Teachers' Course in Mathematics.
2 units, spring quarter (HEATH) TTh 4
3 units, *summer quarter, first term (HEATH) MTWThF 1
Spring, 8; summer, 19

220. Teachers' Course in Physical Education.
3 units [Not given in 1928–29]

[Teachers' Course in Physics.—See Physics 200.]

222. Teachers' Course in Spanish.
2 units, spring quarter (GUERRERO) WF 4
Spring, 6

223. Criticism and Supervision of Instruction.—A few advanced students, who have had sufficient teaching experience, are allowed to undertake the personal investigation, in the schools of the vicinity, of problems in instruction or supervision. Collateral reading and detailed written reports are required. Enrollment only after conference with the instructor concerned.
1 unit, autumn, *winter, and *spring quarters (PROCTOR) By arrangement
Autumn, 6; winter, 6; spring, 7

224. Modern Methods in High-School Teaching.—A course for principals, supervisors, experienced teachers, or prospective teachers who have had an elementary course in teaching methods and management. Reading, reports, discussion, and lectures on modern teaching methods, with a consideration of supervised or directed study, socialized methods, and problem-project teaching.
2 units, winter quarter (BENJAMIN) TTh 8
2 units, summer quarter, last four weeks only (BENJAMIN) MTWThF 8
Winter, 33; summer, 52

C. COURSES FOR TEACHERS OF SPECIAL SUBJECTS

A number of special courses of instruction, and groupings of courses, designed to prepare teachers for special work in the public schools, have been arranged and are described in the *Announcement of the School of Education* (issued in June). These include courses designed to prepare manual arts teachers and teachers of home economics (in connection with one of the State Teachers Colleges), and teachers of the various high-school subjects.

SCHOOL OF ENGINEERING

THEODORE JESSE HOOVER, Dean
CHARLES MOSER, Secretary

The School of Engineering has been organized to include the existing engineering departments, the Department of Military Science and Tactics, and such other engineering departments as may be hereafter established. The faculty of the School consists of the Dean and all members of the faculties of component departments.

The purpose of the School provides a four-year curriculum leading to the degree of Bachelor of Arts in Engineering, and two-year graduate curricula leading to the degree of Engineer.

The curriculum leading to the degree of Bachelor of Arts in Engineering is designed to give the student the broad fundamentals of an engineering education without specialization in any particular branch of engineering; it recognizes the fact that the same general fundamentals are used by all engineers in the solution of their problems. It is planned to include such studies as, together with the high-school and Lower Division preparation, will give the student a wide experience among the different departments of knowledge to broaden his outlook, stimulate his interests, disclose the range of his aptitudes, and discover those lines of effort for which he is best fitted. This curriculum gives the student a certain number of options which he can use as he sees fit.

Students desiring to take up civil, electrical, mechanical, or mining engineering, as a profession, will register during the freshmen and sophomore years in the Lower Division and complete the curriculum for these years as outlined on pages 237–238. After completion of the Lower Division requirements such students will register in the School of Engineering during the junior and senior years and complete the curriculum as outlined on page 238. Upon satisfactory completion of this four-year curriculum there will be conferred the degree of Bachelor of Arts in Engineering.

During the first year the student in the School should give only "Engineering" as his probable choice of major interest. At every time of registration thereafter he should express his preference, if he has already formed a decision, as to the department in which to do his graduate work. For those students who express such a preference the elective units in the undergraduate curriculum should be largely devoted to undergraduate courses recommended by the department of his choice. It will be an advantage to the student to make a choice of the branch of engineering for his future graduate work before the beginning of his third year. If such choice is deferred beyond the beginning of his third year, it may lead to additional work during his graduate years, or at least to less thorough preparation in his chosen field.

After receiving the degree of Bachelor of Arts in Engineering, or an acceptable equivalent, a student is eligible for registration in the departments of Civil, Electrical, or Mechanical Engineering, or Mining and Metallurgy, and, upon fulfilling the departmental requirements and completing ninety units (two years) of approved work, will receive the degree of Engineer in Civil, Electrical, Mechanical, Mining, or Metallurgical Engineering. The details of the two-year curriculum for the degree of Engineer will be prescribed by the faculty of the department concerned.

It is provided, however, that the degree of Bachelor of Arts in Civil Engineering, Electrical Engineering, Mechanical Engineering, and in the Pre-Mining Curriculum will be given to those students who were in May, 1926, registered in the University and fulfill the requirements of the departments concerned and of the University for that degree and apply to have it granted to them. Such students will continue to register in the engineering departments. (See the announcements of the engineering departments.)

The entrance requirements are those defined by the University for admission to the Lower Division. Entering students who plan to follow the undergraduate curriculum of the School of Engineering should be thoroughly prepared in elementary mathematics, with entrance credit in algebra (at least two units), plane geometry, and plane trigonometry, in order to take the first year's work in mathematics required of all engineering students. Furthermore, it is advisable for them to have entrance credit in mechanical drawing and in biological science.

The curriculum for the degree of Bachelor of Arts in Engineering is as here set forth arranged as a four-year schedule. The sequence of courses shown in this schedule will be modified, so far as requirements of the Lower Division and prerequisites permit, to meet the needs of the individual student, and to balance the size of the various classes in any one subject. For example, all the Engineering Shops courses are given in the autumn, winter, and spring quarters. Any two courses may be chosen by the student, limited only by the capacity of the laboratories. Although shown in the schedule as being given in the autumn and spring quarters, sufficient registration is desired for the winter quarter to make operation of all three laboratories possible, and such necessary readjustment of schedule will usually be made when the student confers with his faculty adviser.

FOUR-YEAR CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF ARTS IN ENGINEERING*

First Year, Total Units, 44

Subject	Course No.	Autumn	Winter	Spring
†Foreign Language		3	3	3
Linear Drawing and Lettering	C.E. 1, 2	..	1	1
Chemistry	Chem. 10, 11, 12	4	4	4
Co-ordinate Geometry	Math. 10, 11	3	3	..
Calculus	Math. 21	..	..	3
Citizenship	Citizenship 1–3	4	4	4
Total		14	15	15

* This schedule presupposes entrance credit in Mathematics sufficient to admit to Mathematics 10 (see page 384), two years of Foreign Language, Chemistry, Biological or General Science, and American (or other) History. If these entrance credits are not presented, certain adjustments must be made. These adjustments may delay graduation; but deficiency in Chemistry can be made up during the first year by taking Chemistry 1, 2, and 3; deficiency in one of the two units of Foreign Language can be made up by taking five instead of three units in each quarter of the first year, and a deficiency in one-half unit of Mathematics can be made up by taking an appropriate three-unit course in the first quarter of the first year, and starting Mathematics 10 in the second quarter, thereby adding three units to the schedule of the third quarter of the second year. Any student with more serious deficiencies in these subjects, and any deficiencies in Biological Science or History, should receive advice from the Registration Committee of the School of Engineering.

† If the foreign language requirement of the Lower Division has been completed, foreign language may be omitted from the first year, three units being devoted to the Group I requirement of the Lower Division and the remaining six units to other courses.

Second Year, Total Units, 45

Subject	Course No.	Autumn	Winter	Spring
English Composition	Engl. 2a, 2b	3	..	3
Extemporaneous Speaking	Engl. 7	3	..	..
Calculus	Math. 22, 23	3	3	..
Heat and Electricity	Physics 13, 14	..	4	4
Descriptive Geometry	M.E. 10	4	..	..
Engineering Drawing	M.E. 11	..	4	..
History		3	3	3
Surveying	C.E. 20	..	..	5
Total		16	14	15

Third Year, Total Units, 46

Subject	Course No.	Autumn	Winter	Spring
Theoretical Mechanics	C.E. 30, 31	5	5	..
Hydraulics	C.E. 106	..	..	5
Engineering Geology	Geol. 1a	5	..	..
Electricity in Engineering	E.E. 102, 103	..	3	3
Engineering Shops	M.E. 1, 2, 3	2	..	2
Exposition	Engl. 131	..	3	..
*Electives		3	4	6
Total		15	15	16

Fourth Year, Total Units, 45

Subject	Course No.	Autumn	Winter	Spring
Mechanics of Materials	C.E. 110	5	..	..
Pyrometallurgy of Iron and Steel	M. & M. 105	..	3	..
Engineering Thermodynamics	M.E. 132	3	..	..
Heat-Power Laboratory	M.E. 122	..	2	..
Engineering Economics	C.E. 130	..	..	3
*Electives		7	10	12
Total		15	15	15

GROUP A

Bacteriology 100, 101, 102, 104
Chemistry 20, 127
Economics 4, 6, 119, 120
English 8, 132
Geology 103, 121, 141, 142, 143, 160
Law 101, 102, 103
Mathematics 120, 122, 130, 131, 132, 161, 163, 164
Physics 100, 106, 110, 111
Philosophy 1, 5
Psychology 101
Zoölogy 102

GROUP B

Civil Engineering 101, 102, 103, 104, 105, 117, 131, 150, 151, 180
Electrical Engineering 104, 124, 108, 109
Mechanical Engineering 1, 2, 3, 113 (4 units), 123, 133
Mining and Metallurgy 101, 103, 108
Military Science 151, 152, 154, 156

* Of the forty-two units of electives available in the third and fourth years, twenty-two are intended to provide for prerequisites to graduate work in the department of the student's choice and should be largely devoted to undergraduate courses recommended by that department. The remaining electives (twenty units) must be chosen from the following courses, not less than eight units from each group.

CIVIL ENGINEERING

Charles David Marx, Leander Miller Hoskins, Professors Emeritus

†Charles Benjamin Wing, John Charles Lounsbury Fish, Halcott Cadwalader Moreno, Charles Moser, Leon Benedict Reynolds, Professors
Earl Charles Thomas, James Bertrand Wells, Associate Professors
Eugene L. Grant (Montana State College), Acting Associate Professor (Spring Quarter)
Walter William Wegner, Assistant Professor

This department admits to its courses any student of the University showing evidence of adequate preparation for the work. Courses intended primarily for Lower Division students are numbered 1 to 99; for Upper Division students, 100 to 199; and for graduate students, 200 to 299.

UNDERGRADUATE STUDY

Undergraduate students having the profession of Civil Engineering in view, will pursue the curriculum leading to the degree of Bachelor of Arts in Engineering (see page 237), registering in the School of Engineering after completing the Lower Division requirements. The student is urged to consult with members of the Civil Engineering faculty when arranging his program of study for his third and fourth undergraduate years.

The department does not schedule courses in the summer quarter but encourages the student to obtain employment on engineering projects during the summer vacations.

GRADUATE STUDY

This department offers opportunities for graduate study in the following fields:

a) Structures
b) Hydraulics
c) Sanitation
d) Railroads
e) Highways
f) Engineering economics
g) Research

Work may be done in connection with regular courses or as research independently of them. The facilities for work are here described.

The University has provided in the various fields of civil engineering the leading books and bound volumes of periodicals, the more useful of which are kept in the department's reading room in the engineering building.

The department's laboratories are equipped for investigating the properties of materials (including road materials) with respect to tension, compression, flexure, torsion, endurance, hardness, etc.; and for the investigation of flow in open or closed conduits, through orifices, over weirs, etc. The laboratories and equipment of the Departments of Biology, Bacteriology, and Chemistry are open to students doing advanced work on qualities and properties of water and sewage as related to problems of water purification and sewage treatment.

† Absent on leave, 1928–29.

The University mechanician shop is available, so far as the department's funds permit, for the construction of special apparatus devised by the advanced student to facilitate his investigations.

Within a practicable radius of travel from the University there are engineering works of great variety, under construction or operation, which are open to observation and study by engineering classes. For example:

Engineering works for the collection, development, storage, and distribution of water for municipal, power, and irrigation uses are nowhere more extensive and varied than on the Pacific Coast. They provide exceptional opportunities for observation and investigation. Problems relating to the disposal of city sewage and industrial wastes (from canneries, milk plants, sugar factories, etc.) are particularly perplexing due to absence of streams with sufficient flow for dilution, high average temperature producing great bacterial activity, etc. Many of these problems are unsolved and the opportunity and need for research are unlimited. Municipal sewage treatment plants of several types are located within reasonable distance.

Graduate standing: The requirements for graduate standing are fulfilled by graduates of colleges and universities of recognized rank. Admission to technical graduate standing does not imply admission to candidacy for an advanced degree. The requirements for admission to candidacy for the degree of Engineer in Civil Engineering are stated in paragraph "Engineer" under "Advanced Degrees" on page 154.

Program of study: The program of study of graduate students in this department must be planned in advance and approved by the department.

ELEMENTARY ENGINEERING

1. Linear Drawing.—A training in the use of drafting instruments the purpose of which is to enable the student to construct accurate pencil drawings and make clean-cut ink lines. Required of all students in Engineering or Geology who have not received equivalent training in high school or elsewhere. Students who have entrance credit in mechanical drawing may not receive university credit for this course.

The instruments and equipment for this course cost from thirty to forty dollars. Students are cautioned against purchasing cheap, poorly made drawing instruments. Such instruments are not suitable for engineering drawing. A list of approved brands of drawing instruments will be found in the textbook *Linear Drawing and Lettering,* by J. C. L. Fish. Before purchasing instruments not so listed, the student should consult the instructor.

1 unit, autumn, *winter, and *spring quarters (THOMAS)
W 1:05–4:05, or F 1:05–4:05

Autumn, 28; winter, 24; spring, 17

2. Lettering.—A training in engineering lettering and title making. Open to all students, and required of those whose major is in Civil, Mechanical, or Electrical Engineering, in Engineering Chemistry, or in Geology and Mining, whether or not they have entrance credit in mechanical drawing. (This requirement is waived, however, for a student who satisfies the instructor that he has had the equivalent of this course by submitting certified work in lettering or by passing a special examination.)

1 unit, autumn, *winter, and *spring quarters (THOMAS)
W 1:05–4:05, or F 1:05–4:05

Autumn, 60; winter, 57; spring, 49

ENGINEERING MATHEMATICS

30. Theoretical Mechanics.—A course covering the fundamental principles of statics, kinematics, and kinetics, restricted mainly to coplanar forces and to plane motion of particles and of rigid bodies. The course is designed as preparation for Course 110, Mechanics of Materials, but is open to all whose preparation includes the equivalent of Mathematics 10, 11, 21, and 22.
5 units, autumn quarter (MORENO) MTWThF 9
5 units, *winter quarter (WEGNER) MTWThF 10
Autumn, 81; winter, 29

31. Theoretical Mechanics.—Continuation of Course 30.
5 units, winter and *spring quarters (MORENO) (winter) MTWThF 9; (spring) MTWThF 10
Winter, 68; spring, 31

101. Engineering Computation.—A course in numerical mathematics with applications to engineering problems.
2 units, winter quarter (MORENO) MW 11
Winter, 39

102. Applications of Calculus.—Applications of calculus and differential equations to engineering problems. Prerequisite: Grade B in calculus.
3 units, spring quarter (MORENO) [Not given in 1928–29]

103. Nomographs.—An elementary course on the construction and use of nomographs, including some other graphic methods.
2 units, autumn quarter (MORENO) TTh 11
Autumn, 13

104. Nomographic Drawing.—A course in advanced drafting, supplementary to 103. Prerequisite: Courses 1 and 2.
1 or 2 units, autumn quarter (THOMAS) [Not given in 1928–29]

105. Graphic Statics.—A supplementary course to Civil Engineering 30, which may be taken in conjunction with it.
1 unit, winter quarter (WEGNER) F 11
Winter, 20

116. Empirical Equations.—Treats of empirical formulas, interpolation, and approximate methods.
3 units, spring quarter (MORENO) MWF 9
Spring, 14

117. Engineering Mathematics.—A prerequisite to Electrical Engineering 202. The course includes those parts of complex numbers, infinite series, hyperbolic functions, differential equations, and Fourier's series that are helpful in understanding the power line equations. Prerequisites: Mathematics 21, 22, 23, and some knowledge of alternating currents.
3 units, autumn quarter (MORENO) MWF 11
Autumn, 19

118. Differential Equations in Engineering.—In this course special attention is given to the setting up of the differential equation, the problems being drawn from various fields of engineering. Prerequisites: grade B in Calculus and Mechanics.
2 units, spring quarter (MORENO) TTh 9
Spring, 31

218. Directed Reading.—Reading courses in advanced engineering mathematics may be arranged upon consultation with and approval of the instructor.
1 or 2 units, winter and *spring quarters (MORENO) By arrangement
Winter, 1; spring, 3

MECHANICS OF ENGINEERING

10. Strength of Materials.—A course in materials with reference to their physical properties and methods of testing. Lectures and laboratory. The laboratory program is arranged to meet the needs of students in various fields. Open to all students of the University without prerequisites.

2 units, spring quarter (MOSER) TTh 8

Spring, 13

106. Hydraulics.—Lectures and laboratory problems. Fluid pressure and equilibrium, flow of water through orifices, over weirs, in open and closed conduits. Laboratory: Calibration of instruments. Measurements of pressure, velocity, flow, friction loss, etc., under various conditions. Open to students who have completed Course 30.

5 units, spring quarter (MOSER)
Lec. MWF 9; Lab. MWF 10–12, or TTh 9–12, or MT 1:05–4:05

Spring, 108

[NOTE.—See also Hydraulic courses listed under Mechanical Engineering.]

110. Mechanics of Materials.—Lectures and laboratory problems. Strength and elastic properties of the ordinary materials of engineering construction. Simple tension, compression, and shear. Flexure, with application to simple, continuous, and nonhomogeneous beams. Long columns, torsion, repeated stress, sudden stress, resilience, etc. Testing strength and elastic properties of materials and structures. Open to students who have completed Courses 30 and 31.

5 units, autumn and *spring quarters (MOSER)
Lec. MWF 9; Lab. MWF 10–12, or TTh 9–12, or MT 1:05–4:05

Autumn, 72; spring, 5

111. Mechanics of Materials.—Continuation of Course 110 above.

5 units, winter and spring quarters (MOSER)
Lec. MWF 9; Lab. MWF 10–12, or TTh 9–12

Winter, 15; spring, 1

212. Research.—Investigation of materials with respect to their physical properties and the methods employed in their utilization in engineering fields. Open by permission to advanced students.

2 or more units, winter quarter (MOSER) [Not given in 1928–29]

213. Current Problems.—Individual investigation and discussion of some current problem. Open by permission to graduate students.

2 units, winter quarter (MOSER) [Not given in 1928–29]

TOPOGRAPHIC ENGINEERING

20. Elementary Surveying.—Recitations; co-ordinates of surveying; measurements; errors; surveying methods. Field: exercises in the care and use of instruments; traverse surveys; stadia surveys; leveling. Drafting Room: plotting and adjusting traverses; computing areas; plotting profiles; map drafting. Prerequisites: Civil Engineering 1 and 2, Mathematics C.

5 units, autumn quarter (WEGNER)
Rec. TTh 8; Field and Dft. MTW 1:05–4:05, or WThF 1:05–4:05

3 units, *winter and *spring quarters (WEGNER, GRANT)

Autumn, 31; winter, 25; spring, 59 (2 sections)

23. Special Surveying.—Special courses intended for students who have completed Course 20, or who have had practical experience in surveying, and who are interested in continuing some particular branch of surveying. Open only by permission.

1, 2, or 3 units, autumn and *spring quarters (WEGNER) By arrangement

Autumn, 1; spring, 3

125. Advanced Surveying.—Adjustment of instruments; determination of azimuth; land surveying; base line measurement; triangulation; manipulation of the plane table. Prerequisite: Course 20.

3 units, autumn quarter (WEGNER) Field and Dft. WThF 1:05–4:05
Autumn, 9

126. Advanced Surveying.—Topographic surveying; introduction to city, hydrographic, and photographic surveying; railroad and highway curves. Prerequisite: Course 20.

3 units, winter quarter (WEGNER) Field and Dft. WThF 1:05–4:05
Winter, 8

127. Engineering Surveys.—The application of surveying to engineering problems. Reconnaissance, preliminary, location, construction, and maintenance surveys pertaining to railroads, highways, waterways, etc. Prerequisite: Course 126.

3 units, spring quarter (WEGNER) Field and Dft. WThF 1:05–4:05
Spring, 5

228. Special Engineering Surveys.—Courses arranged to meet special needs of students who have completed Course 127 above, or have had considerable experience in engineering surveys. (Field work can be done only when two or more students elect to pursue the same work.) Open only by permission.

1 or more units (THOMAS, WEGNER) By arrangement
Autumn, 2

[Practical Astronomy.—See Mathematics 161.]

[Adjustment of Observations.—See Mathematics 163.]

[Geodesy.—See Mathematics 164.]

ENGINEERING ECONOMICS

130. Elements of Engineering Economics.—An introduction to the business side of engineering. An analysis of economic factors of engineering practice: the engineer in the field of service, investment choice, estimating, business units, business statistics, valuation, depreciation, economics of service. (Text, written recitations, and problems.) Open to those who have 90 units of credit, and to others by permission.

3 units, spring quarter (GRANT) MWF 8
Spring, 106

131. Problems in Engineering Economics.—The chief purpose of this course is to afford practice in the steps of systematic investigation, from the framing and analysis of problem to the completion of final report. The student's work consists of independent investigation, from the owner's standpoint, of one or more problems within the field of engineering practice. The student may investigate a problem which has previously aroused his interest, or select from those suggested by the instructor. Oral progress report weekly. Prerequisite: Course 130.

1 or more units, winter and *spring quarters (FISH) By arrangement
Winter, 1; spring, 1

232. Engineering Economics.—Independent study or investigation of one or more comprehensive or advanced engineering problems in any field, from the owner's standpoint; with the co-operation of one or more instructors in the field in which the problem lies. Prerequisites: Civil Engineering 130, 131, and the approval of an instructor in the technical field in which the student's problem lies. Prerequisite: Course 131.

2 or more units, autumn and *spring quarters (FISH) By arrangement
Autumn, 3; spring, 1

HIGHWAY ENGINEERING

[**Highway Surveying.**—See Course 127 above.]

140. Highway Engineering.—An analysis of the major problems of highway engineering, including reconnaissance, promotion, finance, location, design, construction, maintenance, and operation. Open to engineering students who have 90 units of credit and to others by permission.

3 units, autumn, *winter, and *spring quarters (THOMAS) MWF 9
Autumn, 7; winter, 5; spring, 5

241. Highway Problems.—Individual investigation. The student selects, investigates, and reports on one or more problems of highway engineering, conferring regularly with the instructor. Open to students who have completed or who are taking Course 140, and to others by permission.

1 or more units, autumn and *winter quarters (THOMAS) By arrangement
Autumn, 1; winter, 1

243. Highway Research and Thesis.—Original study of some problem in Highway Engineering.

Autumn, winter, and spring quarters (THOMAS) [Not given in 1928–29]

RAILROAD ENGINEERING

[**Railroad Surveying.**—See Course 127 above.]

145. Introduction to Railroad Engineering.—An examination of the entire field of railroad engineering, from the point of view of the railroad company, including partial analysis of reconnaissance, location, construction, improvement, maintenance, and operation. This course is a prerequisite to each of the following courses of railroad engineering. Prerequisite: Courses 127, 130, and 131 above.

3 units, autumn quarter (FISH) By arrangement
Autumn, 1

246a. Railroad Construction.—Individual study of one or more of the resident engineer's problems, such as: situation surveys, preliminary plans and estimates, choice of site and type of special structure, working drawings, staking out, inspection, monthly and final estimates, recording and filing information, instructions, reports, selection of equipment and methods for construction. Each problem will be viewed from the standpoint of the railroad company or construction company. Prerequisite: Course 145.

1 or more units, autumn, *winter, and *spring quarters (FISH)
[Not given in 1928–29]

246b. Railroad Location.—Individual study of one or more of the problems of location from the standpoint of the railroad company. Typical problems are: relation of location to income; inter-relation of train weight, grade, speed, and characteristics of the locomotive; effect of change in distance, curvature, rise and fall, and ruling grade on operating expenses; pusher grades and balanced grades. Prerequisite: Course 145.

2 or more units, autumn, *winter, and *spring quarters (FISH)
[Not given in 1928–29]

246c. Railroad Structures and Facilities.—Independent study of one or more problems in this field. Prerequisite: Course 145.

1 or more units, autumn, *winter, and *spring quarters (FISH)
[Not given in 1928–29]

246d. Railroad Maintenance.—Independent study of one or more problems in this field. Prerequisite: Course 145 above.

1 or more units, autumn, *winter, and *spring quarters (FISH)
[Not given in 1928–29]

247. Railroad Reconnaissance.—Individual investigation. An examination of country for feasible routes between two designated points. Collection and reduction of data for determining the relative merits of two or more feasible routes, and for estimating the promise of a road proposed to be built on the most favorable route. Prerequisites: the equivalent of Courses *246a, 246b, 246d,* and the permission of the instructor.

5 or more units, autumn, *winter, and *spring quarters (FISH)
[Not given in 1928–29]

249. Railroad Engineering.—Investigation or research, for thesis or other purpose. Prerequisites: the equivalent of the preceding courses in railroad engineering, and the permission of the instructor.

5 or more units, autumn, *winter, and *spring quarters (FISH)
[Not given in 1928–29]

STRUCTURAL ENGINEERING

150. Materials of Construction.—A study of the common materials of construction; their production, adaptation, and maintenance. Wood, stone, brick, asphalt, lime, cement, and concrete are considered. Lectures and assigned reading. Open to engineering students who have 90 units of credit, and to others by permission.

3 units, autumn and *winter quarters (THOMAS) MWF 11
Autumn, 29; winter, 15

151. Materials of Construction.—A laboratory course supplementing the work undertaken in Course 150. Students are required to make a series of experiments testing physical properties of the materials considered. Open to students who have taken or are taking Course 150.

2 units, autumn, *winter, and *spring quarters (THOMAS)
Two afternoons by arrangement
Autumn, 12; winter, 11; spring, 2

192. Stress Analysis.—Determination of stresses in simple framed structures such as roof trusses and highway bridges; stresses due to moving loads; distribution of stresses and pressure in retaining walls; stresses in tanks and standpipes. Open to students who have taken or are taking Civil Engineering 110.

3 units, winter quarter (WELLS) Lec. Th 11; Computing ThF 1:05–4:05
Winter, 19

193. Elements of Design.—Detailed design of simple framed structures in timber and steel, together with bills of material and cost estimates of same; discussion of factors affecting design of details. Allowable unit stresses. Study of specifications for steel bridges, buildings, tanks, and a typical building code. Prerequisite: Course 192.

5 units, spring quarter (WELLS) Lec. TTh 9; Dft. MTW 1:05–4:05
Spring, 13

256. Foundations.—Reading, seminar, and design; discussion of soil exploration, bearing tests and bearing power of soils, spread footings, pile foundations, coffer dams, open and pneumatic caissons. Special problems in design assigned.

4 units, winter quarter (WELLS) Lec. T 8; Dft. MTW 1:05–4:05
Winter, 2

HYDRAULIC ENGINEERING

160. Collection and Storage of Water.—Design and construction of various types of dams; study of rainfall, evaporation, and runoff; methods

of making stream flow measurements; use of hydrographs and mass curves; graphics of dams. This course is devoted to the problems of collection and storage of water for public supplies, power, and irrigation. Lectures, collateral reading, inspection trips, and computations of types of dams. Prerequisites: Courses 106, 110 (may be taken same quarter).

5 units, autumn quarter (REYNOLDS) Lec. MWF 8; Dft. TTh 8–11
Autumn, 16

161. Development and Distribution of Water.—Capacity, location, and construction of impounding reservoirs; occurrence and use of ground water; hydraulics and construction of wells and infiltration galleries; quantity of water required; conveyance of water in pipes, flumes, canals, and tunnels; distribution systems; fire protection; storage and equalizing reservoirs. This course deals with the development and distribution of water for city, power, and irrigation uses. Prerequisite: Course 160.

5 units, winter quarter (REYNOLDS) Lec. MWF 10; Dft. ThF 1:05–4:05
Winter, 16

262. Protection and Purification of Water Supplies.—Quality of waters; physical, chemical, and bacteriological examination of water; relation of water supplies to disease; purification of water by aëration, sedimentation, coagulation, and filtration; water softening, deferrization, and sterilization. Lectures, collateral reading, inspection trips, and investigation of some source of municipal supply with report. Prerequisite: Course 161.

5 units, spring quarter (REYNOLDS) Lec. MWF 8; Dft. ThF 1:05–4:05
Spring, 13

265. Hydraulic Research and Thesis.—Original study of some problem of Hydraulic Engineering.

Spring quarter (REYNOLDS) By arrangement
Spring, 1

SANITARY ENGINEERING

170. Sewerage.—Quantity of domestic sewage and storm water; hydraulics of sewers; sewer surveys and investigations; design of sewers and appurtenances; pumping of sewage; estimates of quantities and costs; construction methods; supervision and inspection during construction; operation and maintenance. Recitations, collateral reading, and applications by means of problems. Prerequisite: Course 106.

3 units, winter quarter (REYNOLDS) MWF 8
Winter, 13

171. Sewer Design.—Actual design of a sewer system for some selected city, including preliminary investigations, maps, profiles, estimate of cost, report, etc. Prerequisite: Course 170.

2 or more units, spring quarter (REYNOLDS) By arrangement
Spring, 7

180. Specifications and Contracts.—Development of contract principles; varieties of construction contracts; principles of specification writing; study of actual composition and arrangement of a set of specifications covering advertisement, instructions to bidders, proposal, contract, bond, and general clauses; preparation of contracts for engineering services. Lectures, collateral reading, and practice in actual writing of specifications. Open to fourth-year engineering students and to others by permission.

3 units, autumn quarter (REYNOLDS) MWF 11
Autumn, 22

272. Sewage Disposal.—Characteristics of sewage; disposal by dilution; treatment by means of screens, sedimentation tanks, activated sludge, contact beds, sprinkling filters, sand filters, irrigation, and disinfection; location, design, operation, and maintenance of plants. Recitations, collateral reading, inspection trips, and applications by means of problems. Prerequisite: Course 170.

3 units, spring quarter (REYNOLDS) MWF 10
Spring, 11

273. Sewage Disposal Design.—Actual design of a sewage disposal plant for some selected city, including preliminary investigations, layout, details, estimate of cost, report, etc. Prerequisite: Course 272.

2 or more units, autumn, *winter, and *spring quarters (REYNOLDS) By arrangement
Autumn, 2; winter, 3; spring, 2

275. Sanitary Research and Thesis.—Original study of some problem of Sanitary Engineering.

Autumn, *winter, and *spring quarters (REYNOLDS) By arrangement
Autumn, 1; winter, 1; spring, 1

[Students who specialize in Sanitary Engineering are expected to take the following courses in other departments, which are designed with the needs of sanitary engineers in mind.]

[**Qualitative Analysis.**—See Chemistry 20.]

[**Sanitary Bacteriology: Lectures.**—See Bacteriology 101.]

[**Sanitary Bacteriology: Laboratory.**—See Bacteriology 102.]

[**Elementary Limnology.**—See Bacteriology 104.]

Laboratory Fees.—Courses 20, 151, $4 each; 125, 126, 127, $3 each; 106, $2; 1, 2, 110, 111, 130, 160, 170, 180, $1 each.

ELECTRICAL ENGINEERING

HARRIS JOSEPH RYAN, Professor
JOSEPH SNYDER CARROLL, †WARD B. KINDY, THEODORE HARDING MORGAN, FREDERICK EMMONS TERMAN, Assistant Professors
W. BRYAN DUNCAN, Instructor
HUGH HILDRETH SKILLING, Acting Instructor (Winter and Spring Quarters)
EZRA F. SCATTERGOOD, Lecturer on Hydroelectric Power
LEO G. GIANINI, Lecturer on Illumination

The department offers courses of instruction for three groups of engineering students:

I. General Group.—Courses 102 and 103, Electricity in Engineering, are offered especially for third-year students in engineering.

II. Dynamic Group.—Courses 104, 105, 106, 108, 109, 124, 125, and 126 are open to fourth-year students in engineering.

III. Advanced Electrotechnic Group.—Courses 200, 201, 202, 203, 204,

† Absent on leave, 1928-29.

210, 211, 220, 221, 225, 230, 240, 250, 280, 290, 300, Civil Engineering 117, and electives as approved.

The department offers opportunity for graduate study in advanced theory, problems, and laboratory studies in the fundamentals of:

1. Design of machinery and equipment
2. Generation, transmission, distribution, and application of electric power
3. Transmission of intelligence by conduction or radio
4. Measurements and meters
5. Materials and products

Work may be done in connection with regular courses or as research independently of them. The facilities for work are here described.

The department maintains a measurements and standards laboratory wherein instruments are compared and calibrated in terms of the accepted international standards. It also maintains laboratories equipped and organized expressly for routine and research studies of fundamentals in electrical machinery, auxiliaries, communication, and high-voltage phenomena.

The Harris J. Ryan High-Voltage Laboratory has been established by the University with the co-operation of commercial organizations in the electrical manufacturing and power industries for the instruction of advanced students and for researches by students and faculty men alone, and in co-operation with engineers appointed for the purpose by the patrons of the Laboratory. The Laboratory is located on the University grounds, adjacent to the campus. The instruction and work in the Laboratory are supervised by the personnel of the department. The equipment of the Laboratory includes six 350-kilowatt, 350,000-volt, 60-cycle transformers, arranged for all feasible connections in series or parallel as required for maximum voltage sources ranging from 350,000 to 2,000,000 volts, single-phase, and to 1,200,000 volts, three-phase. It includes two synchronous motor-driven, sine wave, three-phase, 1,500-kilovolt-ampere generators, together with all controls and measuring facilities required for instruction and research. In addition to the main room where the 2,000,000-volt transformer set is located, the Laboratory includes rooms for the motor-generator sets, seminar, instruments, offices, and shop. The University has set aside 200 acres of land for accommodation of this Laboratory and the rights of way upon which to erect and study test specimens, conductors, and their insulating supports.

The High-Voltage Laboratory Research Fellowship.—Through an anonymous gift there is available in the Electrical Engineering Department of Stanford University for the academic year 1928–29 a fellowship carrying a stipend of $500, and designated by the authorities of the University the "High-Voltage Laboratory Research Fellowship."

The department promulgates high-voltage laboratory research in two categories:

I. Research undertakings as a department, in some or all of which the hearty co-operation of the holder of this fellowship will be desired.

II. Research undertakings with the approval, support, and guidance of the department to permit the definition and solution of a problem of particular interest to the individual student and of promise of helpfulness in education and practice.

Admission to Courses.—This department admits to its courses any student of the University showing evidence of adequate preparation for the work.

Graduate Standing.—The requirements for graduate standing are fulfilled by graduates of colleges and universities of recognized rank. Admission to technical graduate standing does not imply admission to candidacy for an advanced degree. The requirements for admission to candidacy for the degree of Engineer in Electrical Engineering are stated on pages 154–155.

Program of Study.—The program of study of graduate students in this department must be planned in advance and approved by the department.

Advanced Degrees.—The departmental recommendation of candidacy for an advanced degree will be based on evidence of seriousness of purpose and capacity for independent investigation of engineering problems and the successful completion by the applicant of a curriculum equivalent to that leading to the degree of Bachelor of Arts in Engineering.

Prior to October 1, 1929, the term of graduate study leading to the degree of Engineer in Electrical Engineering will comprise forty-five units of satisfactory work for a student holding the degree of Bachelor of Arts in Mechanical Engineering at Stanford University, or its equivalent. Thereafter for a student holding the degree of Bachelor of Arts in Engineering or its equivalent, such term of study will comprise ninety units.

UPPER DIVISION COURSES

102. Electricity in Engineering.—Lectures, questions, demonstrations, operating practicums. Prerequisites: first six quarters in engineering curricula and Physics 14.

3 units, winter quarter (MORGAN, DUNCAN) Lec. TTh 8; Lab. T, W, or Th 1:05–4:05

Winter, 87

103. Electricity in Engineering.—Continuation of Course 102.

3 units, spring quarter (MORGAN, DUNCAN) Lec. TTh 8; Lab. T, W, or Th 1:05–4:05

Spring, 75

104. Fundamentals of Electric Circuits.—A course in fundamental principles of the electric and magnetic circuits, including simple alternating current circuits. Prerequisites: Electrical Engineering 102 and 103 and registration in Course 124.

2 units, autumn quarter (MORGAN) TTh 10

Autumn, 36

105. Alternating Current Circuits.—Principles of alternating current circuits, and their application in the determination of the performance of alternators and transformers. Prerequisites: Courses 104 and 124, and registration in Course 125.

2 units, winter quarter (DUNCAN) TTh 10

Winter, 37

106. Alternating Current Circuits.—Continuation of Course 105, including a study of induction and synchronous machines and transmission lines. Prerequisites: Courses 105 and 125, and registration in Course 126.

3 units, spring quarter (DUNCAN) MWF 11

Spring, 25

108. Illumination.—After discussing the place of artificial illumination in modern civilization—particularly showing the dependence of plant and office efficiency on proper lighting—the student will be furnished with a working knowledge of the principles of artificial illumination. The following applications will be discussed: shop, office, street, flood, and air-port lighting.

2 units, winter quarter (GIANINI) MF 10

Winter, 28

109. Illumination.—Continuation of Course 108, with specific applications of the fundamental principles. Lecture and laboratory.
2 units, spring quarter (GIANINI) Lec. T 11; Lab. by arrangement
Spring, 14

124. Direct Current Machinery Laboratory.—A study of the characteristic performance of direct current machines. To accompany Course 104. Prerequisite: registration in Course 104.
4 units, autumn quarter (DUNCAN) M, W, or F 1:05–4:05 or S 9–12
Preparation period by arrangement
Autumn, 36

125. Alternating Current Machinery Laboratory.—Alternating current circuits; performance of alternators, transformers, and induction motors; transformer polyphase connections. To accompany Course 105. Prerequisite: registration in Course 105.
4 units, winter quarter (MORGAN, DUNCAN, SKILLING) M or F 1:05–4:05 or S 9–12
Preparation period by arrangement
Winter, 36

126. Alternating Current Machinery Laboratory.—Characteristic performance of induction and synchronous machines, series motors, converters, and rectifiers. Prerequisite: registration in Course 106.
4 units, spring quarter (MORGAN, DUNCAN, SKILLING) M or F 1:05–4:05 or S 9–12
Preparation period by arrangement
Spring, 25

COURSES PRIMARILY FOR GRADUATES

200. Seminar.—A weekly conference for the discussion of current electrical engineering literature and special topics.
1 unit, autumn and winter quarters (RYAN) Th 11
Autumn, 16; winter, 21

201. The Electric and Magnetic Circuits.—A problem course in the theory of electrostatic and electromagnetic circuits. Prerequisites: Courses 106 and 126.
3 units, autumn quarter (TERMAN) TThF 10
Autumn, 11

202. Transmission Circuits.—The theory of circuits transmitting electrical energy, including power and telephone lines, transmission networks, and circle diagrams. Prerequisites: Civil Engineering 117 and Course 201.
4 units, winter quarter (TERMAN) TTh 10; Lab. by arrangement
Winter, 12

203. Transmission Circuits.—Continuation of Course 202, covering such topics as artificial lines, wave filters, electric waves, stability of transmission systems, etc.
4 units, spring quarter (TERMAN) TTh 10; Lab. by arrangement
Spring, 10

204. Advanced Electric Circuits.—Analysis and solution of advanced problems, such as transients, skin effect, electro-mechanical systems, etc. Prerequisite: Course 202.
1 unit, spring quarter (TERMAN) F 10
Spring, 4

210. Equipment Research.—Advanced electric circuits, machinery, meters, controls, materials.
(MORGAN, TERMAN) By arrangement
Winter, 1; spring, 1; summer, 1

211. Machinery and Equipment Laboratory.—Characteristics and applications of induction machines, production and effects of non-harmonic voltages

and currents, oscillographic study of simple circuit transient phenomena, transients in machinery and equipment, controls for machinery and transmission systems.
5 units, autumn quarter (MORGAN) Lab. TTh 1:05–4:05
Autumn, 10

220. Radio Communication.—The generation, radiation, reception, and amplification of high-frequency alternating current energy, and the properties of circuits at high frequencies. Prerequisite: Course 105.
3 units, autumn quarter (TERMAN) MWF 11
Autumn, 3

221. Radio Communication.—A continuation of Course 220.
2 units, spring quarter (TERMAN) MW 10
Spring, 8

225. Radio Communication.—A laboratory course on vacuum tubes and radio circuits. Prerequisite: Course 220.
4 units, autumn and winter quarters (TERMAN) W 10; Lab. by arrangement
Autumn, 1; winter, 9

230. Communication Research.
(TERMAN) By arrangement
Autumn, 1; winter, 3; spring, 4; summer, 1

240. High-Voltage Engineering Laboratory.
5 units, autumn quarter (RYAN, CARROLL) By arrangement
Autumn, 12

250. High-Voltage Engineering Research.
(RYAN, CARROLL) By arrangement
Autumn, 2; winter, 7

280. Electrical Engineering Professional Papers.
(FACULTY MEMBERS AS ASSIGNED)* By arrangement
Autumn, 2; winter, 12 (3 groups); spring, 4; summer, 2

290. Research: Study of Engineering Data.
(FACULTY MEMBERS AS ASSIGNED)* By arrangement
Winter, 2

300. Thesis.
6 units (FACULTY MEMBERS AS ASSIGNED)* By arrangement
Autumn, 1; winter, 7 (3 groups); spring, 6 (2 groups); summer, 2

The Stanford Branch of the American Institute of Electrical Engineers is an organization authorized by the Institute and maintained by the students for the discussion of the *Journal* of the Institute, and other topics.

Laboratory Fees.—$1 per unit of University credit.

Syllabus Fees.—Applicable to syllabus, lantern slides, and charts, 50c to $1 per course.

* Assigned by Executive Head of Electrical Engineering Department.

MECHANICAL ENGINEERING

William Frederick Durand, Professor Emeritus
Edward John Stanley, Assistant Professor Emeritus

Arthur Boquer Domonoske, Everett Parker Lesley, Guido Hugo Marx, Alfred Salem Niles, Elliott Gray Reid, Professors
Huber O. Croft, Charles Norman Cross, Horatio Ward Stebbins, Associate Professors
Boynton Morris Green, Lydik Siegumfeldt Jacobsen, Assistant Professors
Robert Henry Harcourt, James Bennett Liggett, Theron Josiah Palmateer, Teaching Specialists
Albert Clarence Gullikson, †Ulysses A. Patchett, Howard Story Taylor, Instructors

Students enrolled in the School of Engineering, having the profession of Mechanical Engineering in view, should, as far as possible, select their electives from the following group: Mechanical Engineering 1, 2, 3, 113, 114, 123, 132, 133, and Mining and Metallurgy 108. This will facilitate the completion of the requirements for the degree of Engineer in two subsequent graduate years.

Upon completion of the work for the degree of Bachelor of Arts in Engineering the student will be eligible for candidacy for the degree of Engineer in Mechanical Engineering and will then register in the Department of Mechanical Engineering. The curriculum for the degree of Engineer shall consist of 90 units of approved university work including the presentation of a thesis which must receive the approval of the Committee on Graduate Study of the University. Upon completion of this two-year graduate curriculum the candidate will be recommended by the faculty of the department for the degree of Engineer. Graduates of this or other universities, with a degree equivalent to the Bachelor of Arts and with satisfactory undergraduate training, may be accepted as candidates for the degree of Engineer in Mechanical Engineering by the faculty of the department and recommended for the degree when they have completed a course of study substantially equivalent to that prescribed for graduates of the School of Engineering.

EQUIPMENT

The mechanical laboratory is equipped with various prime movers, compressors, blowers, and a refrigerating unit. A Sprague electric dynamometer, arranged for tests on automotive equipment, and various types of absorption and transmission dynamometers are available. Three types of boilers are installed, one of which has a superheater, economizer, and forced draft. Auxiliary apparatus of various types is arranged for testing. The instrument room contains a good collection of engineering and scientific instruments.

The hydraulic machinery laboratory is equipped with representative hydraulic machinery and appliances, which provide facilities for a wide range of research and experimental work in this field.

The Daniel Guggenheim Aëronautic Laboratory is equipped with a wind tunnel having a throat diameter of 8 feet, and a maximum air velocity of

† Absent on leave, winter and spring quarters.

90 miles per hour. Instruments and apparatus consisting of a propeller dynamometer, capable of testing model propellers 5 feet in diameter; a hanging wire type balance, suitable for making tests upon airfoils and complete airplane and dirigible models; pitot tubes; speed meters; altimeters, and the like, are available for making routine tests and for experimental research investigations.

New equipment in the engineering shops provides for graduate instruction and research in the melting, heat treatment, forming, and cutting of metals. Included in this apparatus are cupola, pit, and 125-pound-per-hour electric arc furnaces; electric and gas core ovens; experimental test lathe and grinders to generate standard tool forms; 150- and 300-ampere electric welders; 1000-pound-per-hour forging furnace; 10- and 37-kilowatt electric carburizing furnaces; hump furnace; dilatometer; and various types of pyrometric control.

The services of the University mechanician shop are available through department appropriation, as are also the tools and apparatus of the late William Roberts Eckart, for the construction of special instruments and apparatus.

In the University Library may be found the leading technical periodicals and proceedings, and a well-chosen selection of the published books which have appeared in the past fifteen years.

The income of the William Roberts Eckart Research Fund is available as an annual prize for the best thesis offered by a student in the department.

[NOTE.—Students registered on or before May, 1926, may proceed with their course as outlined in *Announcement of Courses, 1925–26;* and prior to October 1, 1929, the department will enroll the students in the fifth and last year of a five-year course leading to the degree of Engineer. Such students may be either:

a) Graduates of the department with the degree of Bachelor of Arts, or
b) Graduates of other institutions who have covered a substantial equivalent of such undergraduate or first-degree curriculum.]

UNDERGRADUATE COURSES

[NOTE.—Laboratory sections in experimental engineering will be arranged in groups of three students. In so far as the laboratory schedule permits, students will be allowed, with due regard to priority of application, to arrange their own sections and laboratory periods. Enrollment, with the instructor concerned, on registration day or the first day of University instruction, is essential in order both that the laboratory schedule may be prepared and a lecture period selected to meet the requirements of the class as a whole. Enrollment later than the first week will not be permitted under any circumstances.]

1. Forge Practice.—Two laboratory periods per week. Required of Mechanical Engineering students.

2 units, autumn, *winter, and *spring quarters (HARCOURT) By arrangement
Autumn, 48; winter, 23; spring, 18

2. Foundry Practice.—Two laboratory periods per week. Required of Mechanical Engineering students.

2 units, autumn, *winter, and *spring quarters (LIGGETT)
Heats W 1–4; By arrangement
Autumn, 28; winter, 26; spring, 16

3. Machine Shop Practice.—Two laboratory periods per week. Required of Mechanical Engineering students. Prerequisite: Mechanical Engineering 1 or 2.

2 units, autumn, *winter, and *spring quarters (PALMATEER) By arrangement
Autumn, 24; winter, 22; spring, 14

10. Descriptive Geometry.—This course deals with the principles and methods used in determining the space relations of points, lines, planes, and

curved surfaces and their combination in actual objects, without going into details of shop and field notes, machine design, and topographic and geologic mapping, to which subjects it serves as a preliminary. Open to students who have completed or are taking Civil Engineering 1 and 2 or have had their equivalent. Required of students in Engineering.

4 units, autumn, *winter, and *spring quarters (GREEN, GULLIKSON)
Rec. TTh 11; Dft. MT or ThF 1:05–4:05

Autumn 53; winter, 50; spring, 35

11. Engineering Drawing.—Practice in making free-hand sketches of actual machine parts and their dimensioning in practical form for use in the shop. About one-third of the time will be spent in making finished drawings and tracings from these sketches. Drafting conventions, the principles of orthographic projection, and of correct dimensioning will be taken up. The purpose of the course is not only to give training in the reading of machine drawings through the making of a number of dimensioned sketches but also to familiarize the student as much as possible with the elements of machines. Prerequisite: Mechanical Engineering 10. Required of students in Engineering. (Three 3-hour periods in the drafting room and one hour of lecture per week, any quarter.)

4 units, autumn, *winter, and *spring quarters (GREEN, GULLIKSON)
Rec. T 10; Dft. MTThF 1:05–4:05

Autumn, 20; winter, 30; spring, 12

12. Machine Drawing.—Further practice in making working drawings and tracings from original dimensioned sketches. (Two 3-hour periods in the drafting room per week, any quarter.) Prerequisite: Mechanical Engineering 11 and the sketches from that course. Required of Mechanical Engineering students.

2 units, autumn, *winter, and *spring quarters (GREEN, GULLIKSON)
Dft. MTThF 1:05–4:05

Autumn, 15; winter, 11; spring, 4

101. Advanced Forge Laboratory.—Special work for students who have completed Mechanical Engineering 1.

2 units, autumn, *winter, and *spring quarters (HARCOURT) By arrangement

Autumn, 3; winter, 4; spring, 4

102. Advanced Foundry Laboratory.—Special work for students who have completed Mechanical Engineering 2.

2 units, spring quarter (LIGGETT) By arrangement

Spring, 3

103. Advanced Machine Shop.—Special work for students who have completed Mechanical Engineering 3.

2 units, winter and *spring quarters (PALMATEER) By arrangement

Winter, 3; spring, 3

112. Advanced Engineering Drawing.—Advanced work in mechanical graphics covering problems in descriptive geometry, drafting technique, and mechanical drawing. Prerequisites: Mechanical Engineering 10, 11, and 12.

2 to 4 units, winter quarter (GREEN) By arrangement

Winter, 1

113. Elementary Machine Design.

a) Function of machines; motion, force, and work in machines; analysis of mechanism; velocity, acceleration, and effort diagrams; parallel motions; cams; rachets; toothed wheels. The aim is not merely to present a course in pure mechanism, or kinematics, but also—by the introduction of the con-

sideration of force, work, and energy, as well as motion—to show the purposes for which the mechanisms are used and the manner in which they function.

3 units, winter quarter (MARX) Lec. MWF 10
1 unit, spring quarter (MARX) Lec. M 8
Winter, 19; spring, 14

b) Drafting course applying the principles treated in *a*. (Three hours a week drafting, winter and spring quarters.) Prerequisites: Mechanical Engineering 10, 11, and Civil Engineering 1, 2. Courses *a* and *b* must be taken together and are required of students in Mechanical Engineering.

1 unit, winter and spring quarters (GREEN) Dft. W 1:05–4:05
Winter, 19; spring, 14

114. Machine Design.—Study of machine elements, such as bolts and screws; riveted joints, welded joints, and pressure vessels; keys, fits and fitting; axles, shafts, and spindles; journals, bearings, friction, and lubrication; ball and roller bearings; sliding surfaces; couplings and clutches; gear, belt, rope, and chain transmission systems; flywheels; brakes; springs; frames and supports; cylinders, etc.; leading to the design of complete simple machines. (Two hours a week recitations and lectures, six hours in the drafting-room, throughout the year.) Open to students who have completed Mechanical Engineering 113, Mining and Metallurgy 105, and Civil Engineering 110; two quarters required of students in Mechanical Engineering.

4 units, autumn, winter, and spring quarters (MARX)
Lec. TTh 8; Dft. TTh 1:05–4:05
Autumn, 10; winter, 13; spring, 12

115. Valve Gears.—Steam and gas-engine valve-gear analysis and design. Bilgram, Zeuner, Reuleaux, harmonic, etc., diagrams. Plain, automatic, independent cut-off, Corliss, poppet, and locomotive valve gears.

2 units, spring quarter (MARX) Lec. WF 8
Spring, 5

116. Dynamics of Machinery.—Thorough drill in engineering applications of d'Alembert's principle. Practice in considering the simpler problems of mechanical engineering from the point of view of differential equations with emphasis on the physical interpretation of the results. A study of forces in machines and their analytical representation by Fourier's series. Vibration problems of one and of several degrees of freedom will be studied in detail. Graphical methods of determining lowest natural period of vibration of a complicated mechanical system. Prerequisite: Civil Engineering 31.

3 units, autumn and winter quarters (JACOBSEN) By arrangement
Autumn, 5; winter, 4

117. Applications of Theory of Elasticity.—A study of the results obtained by the theory of elasticity rather than a study of the theory itself. Tension and compression from the point of view of non-uniform stress distributions. Graphical methods of solving the flexural problem in general. The beam on the elastic foundation with its many applications to problems of mechanical engineering. Curved beams solved by the theorem of least work. Torsion of bars of any cross section. Dynamic stresses with theories of fatigue of materials. Prerequisite: Civil Engineering 110.

3 units, spring quarter (JACOBSEN) By arrangement
Spring, 7

122. Heat Power Laboratory.—An elementary course covering the methods and instruments used in the testing of steam and internal combustion engines, hydraulic motors, dynamometers, absorption brakes, fluid meters, and similar

apparatus. (Seven experiments each requiring three hours in laboratory and about six hours on reports.) Prerequisite: Mechanical Engineering 132 completed or taken concurrently.

2 units, autumn and *winter quarters (Croft, Patchett, Domonoske) Lab. WThF 1:05–4:05

Autumn, 33 (2 sections); winter, 35

123. Heat Power Laboratory.—Continuation of Mechanical Engineering 122. Includes the testing of steam turbines, boilers, air compressors, fans, and internal combustion engines. (Seven experiments each requiring three hours in the laboratory and about ten hours on reports.) Prerequisite: Mechanical Engineering 122.

3 units, spring quarter (Croft, Domonoske) Lab. 1:05–4:05 by arrangement

Spring, 8

132. Elementary Engineering Thermodynamics.—Introductory course in the application of the mechanical theory of heat to the generation of power. (Three lectures per week.) Prerequisites: Mathematics 23 and Physics 13. Required of students in Engineering.

3 units, autumn quarter (Stebbins) Lec. MWF 10

Autumn, 82

133. Heat Engines.—Study of the principles, characteristics, and economic performance of the various thermal motors. (Three lectures per week.) Prerequisite: Mechanical Engineering 132. Required of students in Mechanical Engineering.

4 units, winter quarter (Stebbins) Lec. MWF 10; problem work as arranged

Winter, 32

COURSES PRIMARILY FOR GRADUATES

200. Industrial Processes.—Laboratory practice in selected shop processes, carried on with the co-operation of the Department of Mining and Metallurgy. Forging, melting, and machining operations will be studied with reference to the chemical and physical properties of the metal and the financial requirements. Prerequisites: Mining and Metallurgy 105 and sufficient familiarity with equipment to carry on work independently.

3 to 5 units, autumn and spring quarters (Taylor and Shop Specialists) By arrangement

Autumn, 1; spring, 4 (2 groups)

210. Shop Administration.—A course of lectures on workshop organization and administration, factory accounting, wage systems, selection of machinery, factory methods, etc. Prerequisites: Shopwork, Courses 1 to 3 inclusive.

4 units, winter quarter (Domonoske) By arrangement

Winter, 2

MACHINE DESIGN

215. Dynamics of Machinery and Fluid Motion.—A study of the potential and of force fields in general. Lagrange's equations with emphasis on engineering applications. Hamilton's variational principle. Euler's equations of rotation with applications to gyroscopic motions and engine governing. A study of fluid motion from a vector point of view. Laplace's continuity equation. Streamline motion with sources and sinks. Vortex motion. Bernoulli's and Euler's works with practical applications. Vibrations of fluids. The generalization of fluid motion as applied to heat flow and to electromagnetism. Prerequisites: Civil Engineering 117 and Mechanical Engineering 116.

3 units, autumn and winter quarters (Jacobsen) By arrangement

Autumn, 1; winter, 1

216. Advanced Machine Design.—Design of complete machines. Students may elect machine tools, cranes, steam or gas engines, or special problems. (One lecture and nine hours drafting per week.) Intended for students who have completed Mechanical Engineering 114, 132, and 133.

4 units, autumn quarter (MARX, GREEN, JACOBSEN) Lec. F 10; Dft. 1:05–4:05 by arrangement
Autumn, 2

217. Theory of Elasticity.—An elementary study of the theory of elasticity from the formal point of view. Theories of combined stresses and theories of failure of material. The two-dimensional problem which is susceptible of experimental solution by polarized light analysis is gone into rather thoroughly. Other problems of interest to the individual student are considered.

3 units, spring quarter (JACOBSEN) By arrangement
Spring, 1

218. Automotive Construction.—The application of the principles of engineering mechanics to the field of automotive transportation. Prerequisites: Civil Engineering 30, 31, 110, and Mechanical Engineering 132, 133.

3 units, autumn quarter (DOMONOSKE) By arrangement
Autumn, 3

EXPERIMENTAL ENGINEERING

225. Testing of Hydraulic Machinery.—Includes tests of centrifugal, rotary, jet, and steam pumps, pulsometers, injectors, water wheels, and hydraulic turbines. (One lecture, three hours in the laboratory, and ten hours on reports per experiment.) Open to students who have completed Civil Engineering 106 and Mechanical Engineering 122 and 132.

3 units, autumn quarter (CROSS) Lec. TTh 8; Lab. 1:05–4:05 by arrangement
Autumn, 2

226. Testing of Heat Exchangers and Power Plant Auxiliaries.—Includes tests of feed water heaters, economizers, condensers, blowers, turbo-compressors, and refrigerating machinery. (One lecture, one conference, three hours in the laboratory, and ten hours on reports per week.) Open to students who have completed Mechanical Engineering 122, 132, and 133.

3 units, winter quarter (CROSS) [Not given in 1928–29]

230. Experimental Investigation of Mechanical Engineering Problems.—Open to all students who have completed Mechanical Engineering 121, 123, 124, Mining and Metallurgy 108, and whose work has indicated their ability to carry on successfully advanced work of this nature. (A complete report of all work must be prepared for the laboratory files.)

3 to 6 units, spring quarter (CROFT, PATCHETT) By arrangement
Spring, 1

POWER PLANT ENGINEERING

231. Heat Transmission.—A study of the mathematical and empirical theory of conduction, convection, and radiation, and a consideration of the laws of fluid flow as applied to engineering heat-transmission problems. The course includes a discussion of temperature measurement and apparatus for determining heat-transfer constants. Individual problems involving heat transfer will be assigned. Prerequisite: Graduate standing in Engineering.

3 units, spring quarter (CROFT) By arrangement
Spring, 5

234. Applied Thermodynamics.—Continuation of Courses 132, 133. Irreversible operations, flow of gases and vapors, design of turbine nozzles.

Application of thermodynamic theory to advanced and special problems. Prerequisite: Mechanical Engineering 122, 132, and 133. (Three lectures per week.)

4 units, spring quarter (Cross) Lec. MWF 10; problem work as arranged
Spring, 1

235. Central Power Stations.—Study of the principal problems presented by the design and operation of modern central power stations driven by heat prime movers. Prerequisites: Mechanical Engineering 122, 132, and 133. (Two lectures per week.)

3 units, autumn quarter (Cross) Lec. TTh 9; problem work as arranged
Autumn, 3

236. Pumping Machinery.—Discussion of the principal problems arising in the design and operation of pumping machinery of various types, displacement, centrifugal, rotary, propeller, and for various purposes, general service, boiler feed, fire service, mine drainage, irrigation, municipal supply, oil line service, etc. (Two lectures per week.) Prerequisites: Mechanical Engineering 122, 132, and Civil Engineering 106.

3 units, winter quarter (Cross) Lec. MWF 9; problem work as arranged
Winter, 5

237. Hydraulic Machinery and Power Stations.—Elements of hydraulic machinery with special reference to prime movers. Elements of the design of hydraulic power stations with special reference to modern hydroelectric practice; general control of water in tunnels and penstocks, surge chamber, control of surges and shocks, valves and regulating devices, penstocks and their installation, selection of units, characteristics of impulse and reaction types, speed regulation, installation tests, and special problems. Prerequisite: Civil Engineering 106. (Four lectures and three hours' office work per week.)

5 units, spring quarter (Stebbins) Lec. MTWTh 9; problem work as arranged
Spring, 6

238. Power Plant Economics.—A brief study of fundamental financial calculations, equipment costs, best type of prime mover, economic size of units, load curves. Prerequisite: Civil Engineering 130. (Two lectures per week with problems.)

3 units, spring quarter (Cross) [Not given in 1928–29]

239. Refrigeration.—Thermodynamics of refrigeration; refrigerating systems and industrial applications. Prerequisites: Mechanical Engineering 122 and 132.

3 units, winter quarter (Cross) Lec. TTh 9; problem work as arranged
Winter, 5

AERONAUTICS

240a. Introduction to Aëronautics.—History, classification, and explanation of the principles of flight of all types of aircraft, elementary laws of aërodynamics, properties of airfoils, mechanics and basic aërodynamics of the complete airplane, elements of performance and static stability. Lectures with problems.

3 units, autumn quarter (Reid) By arrangement
Autumn, 11

240b. Aërodynamics of the Airplane.—Theory of the lift and drag of airfoils and their combinations according to Lanchester, Prandtl, and Glauert. Prediction and analysis of airplane performance. Lectures with problems.

3 units, winter quarter (Reid) By arrangement
Winter, 9

240c. Advanced Aërodynamics.—Critical study of airfoil properties, including boundary-layer phenomena, slotted wings, etc. Stability, dynamic and rotary, and a résumé of the work of principal aërodynamic laboratories. Lectures with problems.

3 units, autumn and spring quarters (REID) By arrangement
Autumn, 1; spring, 7

241a. Airplane Structural Design.—Basic methods of analysis and design of airplane structural elements, including computation of reactions, shears, bending moments, deflections of beams, influence lines and loads in truss members, and the design of tension members, struts, and beams of wood and metal. Lectures with problems. Prerequisite: Civil Engineering 110.

3 units, autumn quarter (NILES) By arrangement
Autumn, 11

241b. Airplane Structural Design.—Advanced methods of analysis of airplane structural elements including computations of stresses due to torsion and combined torsion and bending, deflections of trusses and beams of non-uniform section, application of the method of least work to redundant structures, and computations of stresses in and design of members subjected to combined bending and compression. Also discussion of conventional types of construction as to relative merits and fields of application. Lectures with problems.

3 units, winter quarter (NILES) By arrangement
Winter, 11

241c. Airplane Structural Design.—Continuation of 241*b* and also discussion of critical loading conditions and Department of Commerce rules for stress analysis. Lectures with problems.

3 units, autumn and spring quarters (NILES) By arrangement
Autumn, 1; spring, 9

242. Airplane Design.—The layout and general design of an airplane for a specific duty, including complete performance estimate and stress analysis. Further discussion of types of construction with special attention to design of connecting fittings. Drafting. Prerequisite: Mechanical Engineering 240*a–c* and Mechanical Engineering 241*a–c*. Section *c* of these courses may be taken simultaneously.

3 units, spring quarter (NILES, REID) By arrangement
Spring, 1

243. Theory and Practice of Propeller Design.—Design of air propellers for specific duty, including propellers, windmills or turbines, and fans. Lectures with drafting.

3 units, winter quarter (LESLEY) By arrangement
Winter, 6

244. Aircraft Instruments. -Calibration and test of various instruments used in the navigation of aircraft; such as speed meters, altimeters, and barographs, yaw meters, rate of climb meters, etc., including study of principles of design and operation. Laboratory with occasional lectures.

3 units, autumn quarter (LESLEY) By arrangement
Autumn, 7

245. Properties of Airfoils.—Experimental determination of the forces acting upon airfoils of various forms, including wing, propeller, and strut sections, and complete aircraft models. Laboratory with occasional lectures.

3 to 5 units, winter quarter (LESLEY) [Not given in 1928–29]

246. Properties of Air Propellers.—Experimental determination of characteristic performance coefficients of various propeller models, including air propellers, windmills, and fans. Laboratory with occasional lectures.

3 units, spring quarter (LESLEY) [Not given in 1928–29]

247. Aëronautic Problems.—Investigation, experimental or otherwise, of problems in aëronautics. The intent of this course is to offer an opportunity to students to do work in any field of aëronautics of special interest.

2 to 5 units, any quarter (Lesley, Niles, Reid) By arrangement
Autumn, 1; winter, 1; spring, 2

SPECIAL RESEARCH

251. Thesis.—Investigation of some engineering problem. Required of candidates for degree of Engineer.

2 to 15 units, autumn, *winter, and *spring quarters (Entire Staff) By arrangement
Autumn, 2; winter, 2; spring, 1

Fees.—Courses 1, 2, 3, 101, 102, and 103, $10 each; Courses 113*b*, 234, 238, 50 cents each; Course 235, $1; Courses 123, 225, and 226, $5 each; Course 122, $6; Course 200, $10; Course 230, $1.50 per credit hour.

MILITARY SCIENCE AND TACTICS

Edward Raynsford Warner McCabe, Lieutenant Colonel, Field Artillery, Professor
Frank Jarvis Atwood, Captain, Ordnance Department, Associate Professor
Moses W. Pettigrew, Captain, Field Artillery, Associate Professor
Richard A. Gordan, Captain, Field Artillery, Associate Professor
Charles S. Whitmore, First Lieutenant, Field Artillery, Assistant Professor

Field Artillery and Ordnance units of the Reserve Officers' Training Corps are maintained for the purpose of fitting students to become Reserve Field Artillery or Ordnance Officers while they are taking their regular college courses. This enables them in case of a national emergency better to perform military duty in the service of their country and with the rank for which their capabilities and training as college graduates fit them.

The course is planned to cover a period of four academic years. Any student electing the course is expected to do so with the idea that he will complete the first two years' basic course and, if possible, elect and complete the last two years' advanced course; and that upon its satisfactory completion he will accept from the President of the United States a commission, as Second Lieutenant of Field Artillery or of Ordnance in the Officers' Reserve Corps. If the college course is completed in three years, the commission may be awarded at that time, provided all subjects are covered.

The basic course is the same for both units. It consists of the first two years, completion of which fulfills the University requirement of six quarters of military or physical training. The lecture courses are classed in Group II of the Lower Division requirements. The obligation to complete the basic course may be canceled for good and sufficient reasons approved by the head of the department and the President of the University. All students enrolled in the R.O.T.C. are furnished uniforms and equipment without cost to themselves.

The Advanced Course is open to selected students who satisfactorily complete the basic course. A specially tailored uniform is furnished those taking the advanced course. Advanced Course students are required to

attend one summer instruction camp of six weeks, the government defraying all expenses, including food, clothing, and travel to and from camp. The camp is of six weeks' duration and is a period of interesting and instructive work with the physical and moral development of the students well provided for. In addition it is valuable for its broadening effect on the student, who is associating with men from other leading American universities. Men taking the advanced course receive in addition to the foregoing commutation of subsistence at the rate of $9 per month for two years and $21 per month while at the required camp. Five units of credit will be given for satisfactory completion of the camp.

The United States Government places at the disposal of the University for instruction purposes the necessary number of horses and horse equipment; personal equipment; one complete 75-millimeter battery with fire control and reconnaissance instruments; motor equipment including caterpillar tractors, trucks, and motorcycles; and a well-equipped ordnance laboratory.

FIELD ARTILLERY COURSE

First-Year Basic (Freshman)

2. Gunnery.—(Two hours per week.) Simple definitions; the elements of the trajectory and their calculation; determination of firing data both with and without instruments; use of firing data by cannoneers.
2 units, autumn, winter, and spring quarters (Whitmore)
Autumn, 19; winter, 67; spring, 10

11. Practical Work.—(Three hours per week.) Individual instruction in equitation to include saddling, bridling, adjustments, acquiring a firm seat at all gaits; use of the aids. Fundamentals of Military Science.
1 unit, autumn quarter (Pettigrew)
Autumn, 148

12. Practical Work.—(Three hours per week.) Individual instruction in the duties of the cannoneers in the service of the 75-millimeter gun. Gunners examination. Battery instruction in dismounted drill.
1 units, winter quarter (Pettigrew)
Winter, 150

13. Practical Work.—(Three hours per week.) Individual instruction in nomenclature and functioning of the pistol, including safety precautions and care of the pistol. Position and aiming drills, instruction practice on target range. Record practice. Individual instruction in fire control instruments including range finder, battery commander's telescope, aiming circle and field glasses.
1 unit, spring quarter (Pettigrew)
Spring, 125

Second-Year Basic (Sophomore)

4. Topography and Telephony.—(Two hours per week.) Map reading, including the use of scales, conventional signs, orientation, and the grid; visibility, defilade and dead space problems. Use of map in tactical problems, panoramic sketching. Telephones and switchboards; nomenclature, installation, and operation. Communication nets. Radio; operation and use. Message center; operation, writing, and classification of messages.
2 units, autumn quarter (Whitmore)
Autumn, 18

5. Care of Animals.—(Two hours per week.) Lecture course covering the care and conditioning of the horses, including care and management in the field; forage and animal nutrition; types of artillery horses, breeds, and blood lines; shoeing, grooming, stable management and exercise; hippology, anatomy, physiology, points, confirmation and age; wounds, simple diseases and their treatment; veterinary medicines; entraining and detraining; care en route.
2 units, spring quarter (WHITMORE)
Spring, 63

21. Practical Work.—(Three hours per week.) Individual instruction in map making, including construction of pace scales; simple traversing; intersection; resection; contouring. Battery instruction in the composition and use of battery reconnaissance detail, training of scouts and agents. Reconnaissance, selection, and occupation.
1 unit, autumn quarter (PETTIGREW)
Autumn, 129

22. Practical Work.—(Three hours per week.) Individual instruction in equitation to include advanced use of the aids and jumping obstacles. Battery instruction in dismounted drill.
1 unit, winter quarter (PETTIGREW)
Winter, 100

23. Practical Work.—(Three hours per week.) Individual instruction in equitation to include advanced use of the aids, cross-country riding, and gaiting. Battery mounted and tactical exercises.
1 unit, spring quarter (PETTIGREW)
Spring, 80

FIRST-YEAR ADVANCED (JUNIOR)

101. Advanced Gunnery.—(Three hours per week.) All elements of the basic principles of rapid preparation and conduct of fire. Elementary ballistics; the trajectory and its elements; the mission of field artillery; preparation of firing data by parallel and compass methods; dispersion and the law of errors and its practical application to artillery; the firing commands; types of fire as delivered by artillery; method of adjusting on all types of targets, observation axial. Blackboard firing.
3 units, autumn and spring quarters (PETTIGREW)
Autumn, 42; spring, 24

102. Advanced Gunnery.—(Three hours per week.) Lateral observation; use of the aiming circle, plane table, and compass in laying guns by deliberate and more accurate methods; the firing tables; the meteorological message; weather corrections; normal, emergency, and rolling barrages; successive concentrations; aërial observation; flash, sound, and high burst ranging; visibility and dead space. Prerequisite: Course 101.
3 units, winter and spring quarters (PETTIGREW)
Winter, 39; spring, 9

103. Tactical Employment of Artillery Details.—(Three hours per week.) Artillery organization. Battery and battalion details and their use in reconnaissance, selection, and occupation of position. The infantry-artillery team. The artillery combat order. Map problems to include the battalion.
3 units, autumn and winter quarters (MCCABE, WHITMORE)
Autumn, 22; winter, 22

131. Practical Work.—(Three hours per week.) Individual instruction in advanced equitation. The training of remounts; riding with bit and bridoon; jumping. Battery instruction in the composition and use of battery and

battalion reconnaissance details; training of scouts and agents. Reconnaissance, selection, and occupation of position.
1 unit, autumn quarter (PETTIGREW)
Autumn, 60

132. Practical Work.—(Three hours per week.) Map reading including the use of scales, conventional signs; orientation; the grid; laying guns by deliberate methods. Battery instruction in dismounted drill.
1 unit, winter quarter (PETTIGREW)
Winter, 60

133. Practical Work.—(Three hours per week.) Individual instruction in conduct of fire, including practical application on the smoke bomb range of the principles taught in Courses 101 and 102. Battery instruction as officers and noncommissioned officers at mounted drills and at tactical exercises.
1 unit, spring quarter (PETTIGREW)
Spring, 50

SECOND-YEAR ADVANCED (SENIOR)

100. Polo.—(Three hours per week.) Optional. Open to all students who have completed Course 11.
1 unit, autumn, winter, and spring quarters (WHITMORE)
Autumn, 29; winter, 47; spring, 48

104. Tactical Employment of Field Artillery.—(Three hours per week.) Fundamentals of the organization and tactics of the army and its various arms and elements; field artillery organization, tactics, operations, employment, information, ammunition, supply, with special emphasis on artillery-infantry team work; functions of various calibers of field artillery and principles involving the type used; divisional, corps, and army artillery and functions of each; staff organization, functions, and duties; field orders, logistics; map problems.
3 units, autumn, winter, and spring quarters (McCABE)
Autumn, 1; winter, 24; spring, 24

105. Military History and Policy of the United States.—(Three hours per week.) A critical study of our military policy, and a military survey of the most important campaigns and battles of the United States (including the World War). Military operations and strategy. Prerequisite: Course 104.
3 units, winter and spring quarters (McCABE)
Winter, 29; spring, 28

106. Military Law and Administration.—(Three hours per week.) History, authority, sources of military law; military law as applied to the United States Army in peace and in war; procedure in courts-martial; rules of land warfare; military administration to include duties of battery officers upon mobilization.
3 units, autumn and spring quarters (McCABE)
Autumn, 28; spring, 29

141. Practical Work.—(Three hours per week.) Command and leadership, acting as assistant instructors.
1 unit, autumn quarter (PETTIGREW).
Autumn, 33

142. Practical Work.—(Three hours per week.) Command and leadership, acting as assistant instructors.
1 unit, winter quarter (PETTIGREW)
Winter, 42

143. Practical Work.—(Three hours per week.) Command and leadership, acting as assistant instructors.
1 unit, spring quarter (PETTIGREW)
Spring, 40

GRADUATE

251. Command and Leadership.
5 units, autumn quarter (MCCABE)
Autumn, 1

252. Command and Leadership.
5 units, winter quarter (PETTIGREW)
Winter, 1

253. Command and Leadership.
5 units, spring quarter (PETTIGREW)
Spring, 1

SUMMER COURSES

Summer Camp for regularly enrolled students taking the Military Science course. Camp of six weeks' duration.
5 units, summer quarter
Summer, 50

ORDNANCE R.O.T.C. CURRICULUM

[Open to Engineering and Chemistry students only]

FIRST-YEAR BASIC

Subject	Course	Units Autumn	Winter	Spring
Practical Work	M.S. 11, 12, 13	1	1	1
Gunnery	M.S. 2		2	
SECOND-YEAR BASIC				
Practical Work	M.S. 21, 22, 23	1	1	1
Topography	M.S. 4	2		
FIRST-YEAR ADVANCED				
*Materiel	M.S. 151, 154	2	2	
*Ammunition and Explosives	M.S. 152			2
SECOND-YEAR ADVANCED				
Military History and Policy	M.S. 155	2		
*Military Law and Administration	M.S. 156		2	
Organization of the Ordnance Department and Industrial Mobilization	M.S. 157			2

* These courses are listed in Group B of the School of Engineering Curriculum.

During the two years of the Advanced Ordnance course an average must be maintained of three hours per week (not units) of lecture or laboratory work elected from the following listed engineering and chemistry courses:

Chemistry 130, 171, 173
Civil Engineering 110, 117, 130
Electrical Engineering 102, 103, 104, 124
Mechanical Engineering 1, 2, 3, 122, 123, 133
Mining and Metallurgy 105

ADVANCED ORDNANCE COURSES

First-Year Advanced (Junior)

151. Materiel.—(Two hours per week.) A study of the design, manufacture, and use of small arms weapons and the various types of medium caliber artillery materiel.
2 units, autumn quarter (Atwood)
Autumn, 18

152. Ammunition and Explosives.—(Two hours per week.) A study of the design, manufacture, and use of small arms and artillery ammunition including ballistic powders, high explosives, primers and primer mixtures, projectiles and fuses.
2 units, autumn and spring quarters (Atwood)
Autumn, 1; spring, 22

154. Materiel.—(Two hours per week.) Continuation of Course 151. This course includes a study of the design, manufacture, and use of railway and fixed major caliber artillery materiel.
2 units, winter quarter (Atwood)
Winter, 29

Second-Year Advanced (Senior)

155. Ordnance Engineering.—(Two hours per week.) Lectures and problems dealing with the fundamental principles of the design of Ordnance materiel.
2 units, autumn quarter (Atwood)
Autumn, 15

156. Military Law and Administration.—(Two hours per week.) The purpose of the course is to give the student a general knowledge of the procedure of courts-martial and of military law as applied to the United States Army in peace and in war. A study will also be made of military administration to include the duties of battery officers.
2 units, winter and spring quarters (Atwood)
Winter, 10; spring, 2

157. Organization of Ordnance Department and Industrial Mobilization.—(Two hours per week.) A brief outline of the organization of the Army showing the mission and functions of the Ordnance Department, and a detailed description of the organization of the Ordnance Department. Instructions in the regulations and methods pertaining to property accounting. General information on mass procurement, requirements, allocations, organization of the Ordnance District system, and responsibilities of Reserve Officers assigned to districts.
2 units, spring quarter (Atwood)
Spring, 9

158. Ordnance Problems.—Lectures and laboratory work dealing with current Ordnance problems involving design and manufacture. Not a required course.
1 or more units, autumn, winter, and spring quarters (Atwood)
Autumn, 1; winter, 4; spring, 1

[**Physical and Metallographic Constitution of Ordnance Steels.**—(Six hours per week.) This course is not required but may be elected by Ordnance students who have had Mining and Metallurgy 105. A laboratory course designed to acquaint the student with the physical and metallographic properties of steels by means of heat treatment of specimens; determination

of tensile and other properties; microscopic examination and some practice in photomicrography. (See Mining and Metallurgy 107.)
2 units, autumn quarter (Crook, Atwood) By arrangement
Autumn, 1

Summer Courses

Summer Camp for Ordnance Students.—The camp is of six weeks' duration.
5 units, summer quarter
Summer, 16

MINING AND METALLURGY

Theodore Jesse Hoover, Welton Joseph Crook, Frederick George Tickell, Professors
Frank Jarvis Atwood, Waldemar Fenn Dietrich, Associate Professors
Charles Arthur Dobbel, Assistant Professor
Loran Andrew Creglow, Instructor
Orson Cutler Shepard, Acting Instructor
Raymond Jenness Barber, Thomas B. Crowe, John Franklin Dodge, Roy Parmelee McLaughlin, Louis David Mills, Harry Wheeler Morse, Lecturers

Students having the profession of Mining, Metallurgical, Petroleum, or Ceramic Engineering in view, will pursue the curriculum leading to the degree of Bachelor of Arts in Engineering (see pages 237–238), registering in the School of Engineering after completing the Lower Division requirements. Such students are advised to include as many as possible of the following courses as electives:

For all students: Geology 103, 121; Economics 4; Mining and Metallurgy 108.

For mining engineering students: Civil Engineering 150, 151; Geology 142, 143, 161, and 163; Mining and Metallurgy 101, 102, and 106.

For metallurgical engineering students: Chemistry 130, 171, 173; Physics 100; Mining and Metallurgy 102, 106, and either 101 or 103.

For petroleum engineering students: Geology 142, 143; Chemistry 127, 128; Mining and Metallurgy 103.

For ceramic engineering students: Chemistry 130, 171, and 173; Physics 100; Civil Engineering 150 and 151; Mining and Metallurgy 102 and 104.

Upon completion of the work for the degree of Bachelor of Arts in Engineering the student will be eligible for candidacy for the degree of Engineer in Mining or Metallurgical Engineering and will then register in the Department of Mining and Metallurgy. The curriculum for the degree of Engineer shall require a minimum of six quarters in residence, and shall consist of 90 units of approved university work and the presentation of a thesis which must have the approval of the Committee on Graduate Study of the University. Upon completion of this two-year graduate curriculum

the candidate will be recommended by the faculty of the Department for the degree of Engineer.

Graduates with the degree of Bachelor of Arts or its substantial equivalent from other institutions may be admitted to candidacy for the degree of Engineer, and may be recommended for the degree of Engineer by the faculty of the Department when such candidates have completed a course of study which is substantially equivalent to the course provided for in the previous paragraphs.

UNDERGRADUATE COURSES

101. Principles of Mining.—Lectures. Covers the entire subject of the mining of metals and non-metals except fuels, serves as an outline for the orderly development of professional studies and meets the needs of the general engineering student. Includes a study of properties, occurrence, prospecting, development, exploitation, and utilization. Prerequisite: Geology 1*a*.

3 units, spring quarter (DIETRICH) MWF 8
Spring, 28

102. Principles of Metallurgy.—Lectures. Elementary discussion of broad principles of ore dressing and metallurgical operations. Preparatory to more detailed treatment in later courses; crushing, classification, concentration, hydrometallurgy, pyrometallurgy, electrometallurgy. Prerequisite: Chemistry 12 or 4; Physics 1 and 2, or 13 and 14.

5 units, winter quarter (DEPARTMENT FACULTY) MTWThF 10
Winter, 7

103. Principles of Petroleum Mining.—Lectures. Covers the whole subject of petroleum exploitation, giving the student a comprehensive view of the industry, serves as an outline for the orderly development of professional studies, and meets the needs of the general engineering student. Properties, origin, accumulation, and occurrence of petroleum; valuation, development, and production of oil properties; storage, transportation, testing, refining, and utilization of petroleum and its products. Prerequisite: Geology 1*a*.

3 units, spring quarter (TICKELL) MWF 10
Spring, 29

104. General Ceramics.—Lectures. An introductory course to the field of ceramics and ceramic engineering. A brief summary of ceramic manufacturing processes and types of products is included, but the principal emphasis of the course is on the chemistry and physics of ceramic materials. Prerequisite: Chemistry 12 or 4.

3 units, autumn quarter (DIETRICH) MWF 10
Autumn, 7

105. Pyrometallurgy, Iron and Steel.—Lectures. The principles, practice, and cost of producing iron and steel; theory and practice of heat treatment; introduction to metallography of steel; theory, use, and production of alloy steels; nonferrous metals and alloys in engineering construction. Prerequisite: Chemistry 12.

3 units, winter quarter (CROOK) MWF 8
Winter, 77

106. Assaying.—Laboratory and lectures. Determination of gold and silver in ores and metallurgical products. Prerequisites: Chemistry 12 or 4, Geology 121.

5 units, spring quarter (SHEPARD) MTWThF 1:05
Spring, 1

107. Physical and Metallographic Constitution of Ordnance Steel.—A laboratory course designed to acquaint the student with the physical and metallographic properties of steel by means of heat treatment of specimens; determination of tensile and other properties; microscopic examination and some practice in photomicrography. Open to Ordnance R.O.T.C. students only. Prerequisite: Mining 105.

2 units, autumn quarter (Crook, Atwood, Taylor) By arrangement
Autumn, 1

108. Testing of Fuels and Lubricants.—Laboratory and lectures. The standard tests made on coal, fuel oil, lubricants, kerosene, gasoline, and gas.

3 units, winter quarter (Tickell) Lec. TTh 9; Lab. one afternoon a week by arrangement
Winter, 24

109. Ceramic Testing.—Methods of laboratory testing for the determination of the physical properties of clays, and finished products. Interpretation of tests. Prerequisite: Mining 104 (may be taken together).

3 units, autumn quarter (Dietrich) [Not given in 1928–29]

GRADUATE COURSES

Economics of Mining

201. Mine Valuation.—Lectures and problems. General considerations; sampling and measurement; widths and volumes; economic geology; analysis of cost; price of metals; smelter contracts; amortization and depreciation; reserve reports. Prerequisites: Mining 101 and either 102 or 103.

1 unit, autumn quarter (Hoover) Th 10
Autumn, 6

202. Mine Organization.—Lectures. The mining company; forms of business; frauds; selling mines; shares; balance sheet; profits; valuation; taxes; law. Prerequisite: Mining 201.

1 unit, winter quarter (Hoover) Th 9
Winter, 5

203. Mine Management.—Lectures. Organization and discipline of staff; technical committees, consulting engineers, managing directors, general managers; business principles and scientific management; vocational and technical training; personal qualities and efficiency; organization and discipline of labor; reports; supplies and material; costs and accounts. Prerequisite: Mining 202.

1 unit, spring quarter (Hoover) Th 9
Spring, 3

205. Research and Thesis.—Original study of some problem in the economics of mining, metallurgy, or petroleum.

Autumn and winter quarters (Hoover) By arrangement
Autumn, 1; winter, 1

Mining

211. Prospecting and Development.—Seminar and problems. The prospector; geological aspects; placer prospecting, prospecting for deposits in place, methods, and costs; engineering features; boring methods; development plans; methods and cost of shaft sinking, drifting, and raising; engineering records. Prerequisite: Mining 101.

3 units, autumn quarter (Dobbel) MWF 11
Autumn, 6

212. Mine Equipment.—Lectures and problems. The mathematical theory underlying the design and operation of mine equipment. Compressed air, haulage, hoisting, pumping, ventilation. Prerequisites: Mining 101, Civil Engineering 106, 110, Electrical Engineering 102, 103, Mechanical Engineering 122 and 132.
4 units, winter quarter (DOBBEL) TTh 11; Th 1:05
Winter, 5

213. Mine Plant.—Seminar and problems. The economic selection of mine equipment and the lay-out of mine plants. The details of the course are arranged to suit the needs of the individual students. Prerequisite: Mining 212.
3 to 5 units, spring quarter (DOBBEL) TTh 8
Spring, 2

214. Operations.—Seminar and problems. The methods and costs of surface and underground mining. Prerequisite: Mining 211.
5 units, spring quarter (DOBBEL) Lec. MWF 9
Spring, 5

215. Advanced Work in Mining Engineering.—Seminar and problems. Special work in Courses 211 to 214.
2 to 10 units, winter and spring quarters (DIETRICH, DOBBEL) By arrangement
Winter, 2; spring, 1

216. Mine Sampling and Surveying.—Preliminary study and practice during the winter quarter, followed by a field course during the spring vacation. Prerequisites: Civil Engineering 20 and Mining 201.
4 units, winter quarter (DOBBEL) [Not given in 1928–29]

219. Mining Research and Thesis.—Original study of some problem in mining engineering.
Autumn quarter (DIETRICH) By arrangement
Autumn, 1

METALLURGY

221. Comminution, Sizing, and Classification.—Lectures, seminar, and laboratory. Theoretical and laboratory studies of the physical properties of inorganic substances as a basis for evaluating the factors that influence the selection of equipment for crushing, grinding, sizing, classification, thickening, and filtration. Prerequisites: Mining 102 and Geology 121.
5 units, winter quarter (DIETRICH, SHEPARD) MWF 9; Lab. by arrangement
Winter, 1

222. Concentration Processes.—Lectures, seminar, and laboratory. The principles, practice, and cost of the concentration of metalliferous minerals from ores. Prerequisite: Mining 221.
4 units, spring quarter (CREGLOW) TTh 10; Lab. by arrangement
Spring, 1

223. Engineering Applications of Photography.—Demonstrations and laboratory. The technique of the various photographic processes useful to the engineer; copying, photography of apparatus, photomicrography by reflected and transmitted light. Open to limited number of students, by application.
2 units, autumn quarter (TICKELL, CROOK) By arrangement
Autumn, 4

224. Hydrometallurgy, Gold and Silver.—Lectures and laboratory. The principles, practice, and cost of treating ores by amalgamation, cynanidation, chlorination, and lixiviation processes. Prerequisite: Mining 221.
4 units, autumn quarter (CREGLOW) TTh 11; Lab. by arrangement
Autumn, 2

225. Hydrometallurgy, Copper, Lead, and Zinc.—Lectures. The principles, practice, and cost of recovering copper, lead, and zinc from ores by hydrometallurgical processes. Prerequisite: Mining 221.
3 units, winter quarter (CREGLOW) MWF 11
Winter, 1

226. Hydrometallurgy.—Laboratory study of hydrometallurgical problems. To accompany Course 225.
2 to 5 units, winter quarter (CREGLOW) [Not given in 1928–29]

227. Electrometallurgy.—Lectures and seminar. Review of electrochemistry as applied to electro-deposition of metals; principles and practice of electrolytic refining. The principles, practice, and cost of electric furnace work. Prerequisite: Mining 225.
3 units, spring quarter (CREGLOW) MWF 10
Spring, 2

228. Pyrometallurgy, Copper, Lead, and Zinc.—Lectures. The principles, practice, and cost of recovering copper, lead, and zinc from ores by pyrometallurgical methods; details of smelter operations; the physical chemistry of metallurgical operations. Prerequisite: Mining 102.
3 units, autumn quarter (CROOK) [Not given in 1928–29]

229. Design of Furnaces and Kilns.—Seminar and laboratory. The mathematical and laboratory problems will be selected in accordance with the individual interests of the students, and may include pyrometallurgical operations, mine ventilation problems, ceramic drying, and ceramic firing. Prerequisites: Mining 108 and either 101, 102, 103, or 104; Mining 263; Mechanical Engineering 231.
3 units, winter quarter (DIETRICH) [Not given in 1928–29]

230. Metallurgical Calculations.—Seminar and lectures. Solution of problems involving physical chemistry as applied to pyrometallurgy and hydrometallurgy; calculation of efficiency of processes and furnace operations. Blast furnace charge calculations, etc. Prerequisite: Mining 102.
3 units, autumn quarter (CREGLOW) T 8
Autumn, 2

231. Metallography.—Laboratory and lectures. Study of the properties and microstructure of metals and alloys; technique of metallographic investigation and microphotography. Prerequisites: Mining 102 and 105.
4 units, winter quarter (CROOK) [Not given in 1928–29]

232. Pyrometry.—Laboratory and lectures. Determination of high temperatures and calibration of pyrometrical instruments. Prerequisites: Mining 102 and 105.
3 units, winter quarter (CROOK, TAYLOR) [Not given in 1928–29]

233. Heat Treatment.—Laboratory and lectures. Practice in the heat treatment of plain and alloy steels and non-ferrous alloys under controlled conditions. Testing and examination of products. Prerequisites: Mining 231 and 232.
4 units, spring quarter (CROOK) [Not given in 1928–29]

234. Metallurgical Analysis: Ores.—Laboratory. Rapid methods for quantitative determination of constituents of non-ferrous ores and metallurgical by-products. Prerequisite: Mining 102.
3 or 4 units, autumn quarter (SHEPARD) MTW 1:05
Autumn, 4

235. Metallurgical Analysis: Metals and Alloys.—Laboratory. Rapid methods for quantitative determination of constituents of metals and alloys.

ferrous metallurgical products and raw materials. Prerequisites: Mining 105 and 234.
3 or 4 units, autumn quarter (Taylor) [Not given in 1928–29]

236. Industrial Processes.—(Same as Mechanical Engineering 200.)
3 to 5 units, autumn and spring quarters (Domonoske, Crook, Shop Specialists) By arrangement
Autumn, 1; spring, 4 (2 groups)

239. Advanced Work in Metallurgy.—Special work in Courses 221 to 238, inclusive. Subject and prerequisites by arrangement.
2 to 15 units, autumn, winter, and spring quarters (Crook, Dietrich, Creglow) By arrangement
Autumn, 1; winter, 2; spring, 2

240. Metallurgical Research and Thesis.—Original study of some problem in metallurgical engineering.
Autumn and spring quarters (Hoover, Crook, Dietrich, Creglow) By arrangement
Autumn, 1; spring, 1

Petroleum

241. Petroleum Engineering.—Lectures and problems. A course in the application of engineering principles to the solution of underground problems; construction of graphic logs and sections; correlation of strata, study of water problems. Prerequisite: Mining 103.
4 units, autumn quarter (Tickell) MWF 9
Autumn, 4

242. Oil-Well Water Analysis.—Laboratory. Rapid methods for the volumetric analysis of oil-well waters. Prerequisite: Mining 241.
2 units, autumn quarter (Tickell) By arrangement
[Given in alternate years; not given in 1928–29]

243. Oil Field Development.—Lectures. Dealing with the equipment and methods used in drilling oil wells. Prerequisite: Mining 101.
2 units, autumn quarter (Tickell) TTh 9
Autumn, 1

244. Production of Oil.—Lectures. The production of oil, control of wells, pumping methods, operations, theory and operation of gas-lift, dehydration. Prerequisite: Mining 101.
2 units, winter quarter (Tickell) TTh 10
Winter, 2

245. Storage and Transportation of Petroleum.—Lectures and problems. Methods of storage and transportation; methods of gauging, design of tanks and pipelines, prevention of storage losses, fire hazards, gas measurement. Prerequisites: Mining 101, Civil Engineering 106.
3 units, winter quarter (Tickell) TTh 8
Winter, 1

246. Petroleum Refining and Utilization.—Lectures and problems. Refined products and their use for fuels, light generation, and lubrication; the design of heat exchangers; the economics of petroleum. Prerequisites: Mining 101, Civil Engineering 106.
3 units, spring quarter (Tickell) TTh 10
Spring, 2

247. Oil Land Valuation.—Lectures and problems. The methods used in appraising oil lands; estimation of future production, operating costs, depreciation of material, salvage, value of future profits, tax returns. Prerequisites: Mining 101, Mathematics 23.
2 units, spring quarter (Tickell, Dodge) Lectures T 9
Spring, 2

248. Petroleum Refinery.—Laboratory. The analytical distillation of crude petroleum and the examination of its refined products; tests on heat exchangers. Prerequisite: Mining 108.
2 units, spring quarter (TICKELL) By arrangement
Spring, 2

249. Oil Field Sediments.—Laboratory. Mechanical analysis of sediments as to grain size, porosity, mineral content, the microscopic identification of detrital minerals, oil content by extraction and distillation, etc. Prerequisites: Mining 101, Geology 121.
2 units, autumn quarter (TICKELL) By arrangement
Autumn, 5

250. Advanced Work in Petroleum Engineering.—Laboratory. Special work in Courses 241 to 249.
2 to 5 units, autumn, winter, and spring quarters (TICKELL) By arrangement
Autumn, 2; winter, 1; spring, 3

251. Petroleum Research and Thesis.—Original study of some problem in petroleum engineering.
Autumn, winter, and spring quarters (HOOVER, TICKELL) By arrangement
Autumn, 1; winter, 1; spring, 1

CERAMICS

261. Clay Analysis.—Quantitative analysis of the constituents of clays. Prerequisite: Mining 234.
3 units, autumn quarter (SHEPARD) By arrangement
Autumn, 1

262. Refractories.—Lectures, seminar, and laboratory. The manufacture, uses, and testing of refractories. This course is primarily for ceramic engineering students. Prerequisites: Mining 102, 109, and 232.
5 units, spring quarter (DIETRICH) [Not given in 1928–29]

263. Testing of Refractories.—Laboratory. The testing and selection of refractory materials. A short course, especially adapted to the needs of metallurgical students. Prerequisites: Mining 102 and 232.
2 units, spring quarter (DIETRICH) [Not given in 1928–29]

264. Ceramic Glazes.—Lectures, seminar, and laboratory. The theory, preparation, and application of ceramic glazes and enamels. Prerequisites: Mining 109, 221, and 232.
5 units, autumn quarter (DIETRICH) TTh 8; Lab. by arrangement
Autumn, 2

269. Special Problems in Ceramics.—Seminar and laboratory. Special work on economic, technical, or scientific problems in ceramics, adapted to meet the needs of individual students. Prerequisites by arrangement.
5 to 15 units, winter, spring, and summer quarters (DIETRICH) By arrangement
Winter, 2; spring, 2; summer, 1

270. Ceramic Research and Thesis.—Original study of some problems in ceramics.
Winter and summer quarters (HOOVER, DIETRICH) By arrangement
Winter, 2; summer, 1

FOOD RESEARCH INSTITUTE

Carl Lucas Alsberg, Joseph Stancliffe Davis, Alonzo Englebert Taylor, Directors
Holbrook Working, Louis B. Zapoleon, Economists
Merrill Kelley Bennett, Katharine Snodgrass, George Minch Weber, Research Associates

The Food Research Institute, organized under a grant from the Carnegie Corporation of New York for the purpose of studying the production, distribution, and consumption of food, will be in active operation during all four quarters.

Opportunity will be offered to a few properly qualified graduate students to do research work in the Institute, under certain conditions. Preference will be given to students who are already engaged upon a piece of research in the field of the Institute, or who desire to begin work upon such a subject. Students will be expected to devote at least half their time to this research work.

Arrangements should be made in each case in advance of the opening of the quarter. The Executive Secretary, Dr. Taylor, will be glad to answer specific inquiries.

RESEARCH COURSE

201. Food Research Problems.—Research upon subjects lying within the general field of food production, distribution, consumption, and prices.
Autumn, winter, spring, and summer quarters (Alsberg, Davis, Taylor, Working, Zapoleon, Bennett) By arrangement

HOOVER WAR LIBRARY

Ralph Haswell Lutz (Associate Professor of History, *Chairman*), Ephraim Douglass Adams (Professor of History), Joseph Stancliffe Davis (Director, Food Research Institute), Harold Henry Fisher (Curator, American Relief Administration Archives, *Secretary*), §Frank Alfred Golder (Professor of History), Herbert Clark Hoover (Founder), Graham Henry Stuart (Professor of Political Science), Nathan Van Patten (Director of University Libraries), Ray Lyman Wilbur (President of the University), Murray Shipley Wildman (Professor of Economics), Directors
Nina Almond, Librarian

The Hoover War Library is a collection of materials for research in the causes, the conduct, and the results of the World War, including the period of reconstruction since the end of the war. The materials, from all nations whether belligerent or neutral, cover the fields of the social sciences for the period indicated. The collection includes government documents, files of newspapers and serials, manuscript memoirs and diaries of men and women important in world affairs during the war and post-war periods, publications of national and international bodies, both official and unofficial, books and pamphlets. The materials concerning the underlying causes of the war have been extended to the period commencing with the realignment of the world powers after 1871, the formation of the Triple Alliance and the Triple Entente, and the subsequent diplomatic crises which antedated the war. The Library's time limit for the post-war period has been fixed tentatively only. The collection is being made as adequate as possible on the transition from war conditions to post-war normal conditions.

The Hoover War Library has a separate physical existence in the University Library with its own stack, reading room, and staff. The reference staff, including the assistant in charge of the Slavic collection, are present to assist the users of the Library. For only a relatively small part of the Library is there a dictionary catalogue. The uncatalogued section is represented in the reading room by an author's check list arranged in various alphabets corresponding to the arrangement of materials on the shelves. For a complete record of the materials in the Library the student must consult the check list, the small but slowly expanding dictionary card catalogue, or the reference staff.

The use of the unrestricted materials is open to graduate students and faculty of Stanford University, to teachers and graduate students from other universities, and to other qualified investigators approved by the Directors. At present no research fellowships have been established. All funds are being directed to further acquisitions and to administration. The Hoover War Library offers no university courses of instruction but several departments offer courses using its materials. Members of the faculty of the University engaged in active academic work in the social sciences are also directing research work in the Hoover War Library in those fields in which they are concerned.

§Deceased, January 7, 1929.

SCHOOL OF LAW

Marion Rice Kirkwood, Joseph Walter Bingham, Arthur Martin Cathcart, George Edward Osborne, William Brownlee Owens, Harold Shepherd, Chester Garfield Vernier, Clarke Butler Whittier, Professors

Evans Holbrook (University of Michigan), Ernest Gustav Lorenzen (Yale University), Herman Oliphant (Columbia University), Kenneth Craddock Sears (University of Chicago), Acting Professors (Summer Quarter)

James Emmet Brenner, Stanley Morrison, Joseph Danner Taylor, Associate Professors

Oscar Kennedy Cushing, Henry Granville Hill, Leonard Saxton Lyon, Lecturers

ORGANIZATION

The School of Law was established, as a department of the University, in 1893. Its purpose is to provide a thorough legal education for students who are fitted by their maturity and their previous academic training to pursue professional study under university methods of instruction. The curriculum covers three academic years and constitutes an adequate preparation for the practice of law in any English-speaking jurisdiction. In all courses some special attention is paid to problems of local law in the Western States.

By taking advantage of the four-quarter system, with its opportunities for summer instruction, the Law curriculum may be completed in two and one-fourth calendar years.

THE LIBRARY

The Law Library contains over 35,000 volumes, including complete sets of the English, Irish, Scotch, Australian, New Zealand, and Canadian reports, the reports of all Federal courts, a practically complete set of the reports of the American States, the Australian States, and the Canadian Provinces, the National Reporter system, the standard collections of cases, the standard English and American legal encyclopedias, the principal American, English, and Canadian digests and citators, sets of the leading American, British, Canadian, and Continental legal periodicals, together with a good collection of textbooks. There is also a somewhat complete collection of compiled laws, session laws, and other statutory material, both Federal and State, as well as British, Canadian, and Australian.

The class of 1911, upon graduation, adopted a plan for the purchase, from time to time, of works on Legal History. This collection is known as the "Class of 1911 Memorial Collection on Legal History." The class of 1912 adopted a similar plan for the purchase of a memorial collection of celebrated trials.

A further book fund is made possible by the gifts of student and alumni members of the Delta Theta Phi Fraternity. The proceeds of this fund are available for the purchase of books in any field in the discretion of the Faculty.

Mr. Rufus E. Ragland, of the San Francisco Bar, has been a regular

and generous contributor to the Law Library. His gifts to date approximate eight hundred volumes.

Through the efforts of the Stanford Law Association a fund was established in 1923 in memory of Charles Andrews Huston, who was for many years Professor of Law and Dean of this School. The income from this fund is to be used for the purchase of books for the Law Library.

Through the generosity of Justice McFarland, Justice Melvin, Justice W. A. Sloane, Justice Frank H. Kerrigan, and Justice John E. Richards, the Library has received, since 1907, a complete set of the records of the California Supreme Court, and through the generosity of Justice Sloss, Justice Warren Olney, Jr., Justice C. A. Shurtleff, Justice Frank H. Kerrigan, and Justice John E. Richards, a complete set of the records of the District Courts of Appeal.

The University Libraries are also available for use by students of the School of Law.

ADMISSION TO THE SCHOOL OF LAW

Admission to the professional curriculum in Law in regular standing is granted only to students who have received the degree of Bachelor of Arts, or an equivalent degree, from this University or from some other institution of recognized collegiate standing.

In the discretion of the faculty, admission may be granted to a very limited number of students who cannot meet the foregoing requirement, but who are eligible for admission to the University, who are twenty-three years of age, and whose previous experience is such as to justify the presumption of their ability to do the work successfully. Such students are termed "unclassified" and are not eligible for a degree.

It is advised that the matter of admission be settled in advance. For this purpose those seeking admission in regular standing should furnish a complete and official transcript of their college work, showing courses pursued, grades received, and degrees conferred.

Second- and third-year students are admitted at the beginning of any quarter, but first-year students can be accepted only at the beginning of the summer or autumn quarters.

THE DEGREE OF BACHELOR OF LAWS

Students who have received the degree of Bachelor of Arts, or its equivalent, from this University or from some other institution of recognized collegiate rank, and who have satisfactorily completed courses in Law aggregating 117 units and who have devoted nine full quarters of time to the study of Law, and who have otherwise satisfied the requirements of the University and of the School of Law, will be granted the degree of Bachelor of Laws (LL.B.).

THE DEGREE OF JURIS DOCTOR

To be admitted to candidacy for the degree of Juris Doctor a student must be eligible for admission to the School of Law in regular standing, must have completed the work for the first degree in law at this University, or in some other university law school of recognized standing in which work for the first degree in law covers a period of not less than six years of combined academic and law work, and must be approved for candidacy by action

of the Law Faculty. For this purpose there must be furnished a complete and official transcript of the academic and professional work of the applicant, showing in detail courses pursued, grades received, and degrees conferred. This transcript should be sent by the proper official directly to the Dean of the School of Law. Students who have met the foregoing requirements and who have completed with a high average and otherwise to the satisfaction of the Law Faculty thirty-two units of work in law courses not previously taken, including therein at least eight units to be selected from courses numbered 280 to 286, as set forth in this announcement, and who have in addition submitted an acceptable thesis on a legal problem approved by the Faculty, will be granted the degree of Juris Doctor (J.D.).

Students registered in the School of Law on March 1, 1927, may at their election become candidates for either the degree of Bachelor of Laws or Juris Doctor upon satisfying the former requirements for these degrees at any time not later than June, 1930.

NON-PROFESSIONAL COURSES

[Credit in non-professional courses may be counted toward the A.B. degree, but not toward the professional degree.]

101. Business Law I.—An elementary course in the law of contracts to teach the student who expects to become an engineer, doctor, banker, teacher, or business man, but not a lawyer, how and when a contract is made and the risks imposed by law as a consequence of the formation of the contractual relationship. The object of the course is to provide the student with necessary legal information to enable him to seek professional legal advice at the right time. The course acquaints the student with legal and business terms necessary to understand simple legal procedure. Text: Bays, *Cases on Commercial Law.*

3 units, autumn quarter (TAYLOR)
Autumn, 189 (2 sections)

102. Business Law II.—An elementary course in the law of agency and negotiable instruments for the use of students who do not expect to enter law as a profession. The object of this course is the same as that of Business Law I. Prerequisite: Business Law I.

3 units, winter quarter (TAYLOR)
Winter, 129 (2 sections)

103. Business Law III.—This course takes up selected problems of law concerning risks borne by manufacturer, wholesaler, and retailer in trade, corporations, partnership, illegal trade practices, credit and securities, bankruptcy, and torts. The course is a continuation of Business Law I and II and is designed to acquaint the student with certain legal principles which affect business policies. The method of instruction includes assigned readings and reports. Prerequisite: Business Law I and II.

3 units, spring quarter (TAYLOR)
Spring, 87

104. Law for the Journalist.—This course seeks to teach the student not only the risks of journalism as illustrated by cases in the law of libel, but also legal terminology and procedure necessary to understand facts which have significance at law. The course includes selected problems in law involving libel, freedom of the press, civil procedure, rules of evidence, crimes, and criminal procedure.

2 units, spring quarter (TAYLOR)
Spring, 31

200. Law Problems in Business.—This course is given solely for students enrolled in the Graduate School of Business. Such students are advised to take Courses 101 to 103, inclusive, or their equivalent, while undergraduates. The course includes selected legal problems in credit and risk bearing, in credit and commercial instruments, in management, in trade practices, in financial operations, and in governmental regulation and taxation.

1 unit, autumn, winter, and spring quarters (TAYLOR)
Autumn, 46; winter, 41; spring, 37

PROFESSIONAL COURSES

First-Year Courses

[In courses announced as running through more than one quarter a single final examination will be given at the end of the course and credit will be deferred until that time. Successful completion of all first-year courses is required for the law degree.]

201. Introduction to Law.—The primary purpose of this course is to present the historical background and development of law and legal institutions necessary to a proper study of other substantive law courses. To this end consideration is given to an outline of the historical development of English and American courts and procedure, common law and equity. Special emphasis is placed on the formulary system of actions and the elements of common law pleading. A detailed study, by the case method, of the principal common law actions is made. Cook and Hinton, *Cases on Common Law Pleading,* syllabus and selected cases.

4 units, autumn quarter (SHEPHERD)
Autumn, 71

202. Contracts I.—Mutual assent, including offer and acceptance; contracts under seal; statute of frauds; consideration; beneficiaries; assignees; joint and several contracts; illegality; impossibility. The quasi-contractual rights, if any, which arise when contract rights are lacking, are studied. Williston, *Cases on Contracts* (2d ed.), and selected cases.

2 units, autumn quarter; 3 units, winter and spring quarters (WHITTIER)
8 units, summer quarter (OLIPHANT)
Autumn, 60; winter, 55; spring, 49; summer, 15

203. Torts.—Principles of tort liability as developed in the action of trespass; justification and excuse; negligence as a basis of liability; common law and statutory duties of care; legal cause; contributory negligence; absolute liability; deceit; defamation; malicious prosecution and abuse of process; interference with social and business relations, unfair competition, combinations, strikes, boycotts. Ames and Smith, *Cases on Torts* (Pound's ed.) and selected cases.

3 units, autumn, winter, and spring quarters (CATHCART)
Autumn, 66; winter, 60; spring, 54

204. Criminal Law.—Nature and sources of criminal law; crime as an act; attempts; criminal intent; circumstances affecting illegality of act; specific offenses; crimes against the person, larceny and allied offenses, crimes against the dwelling house, conspiracy. Mikell, *Cases on Criminal Law* (2d ed.).

3 units, autumn and winter quarters (VERNIER)
Autumn, 66; winter, 57

205. Personal Property.—Possession: nature, importance, and legal effect. Possessory interests arising from: tenancy, bailment, lawful seizure. Rights of a finder. Possession without right. Certain methods of acquiring title to

chattels; statutes of limitations; gifts *inter vivos;* accession; confusion, etc. Liens and pledges. Conversion. Warren, *Cases on Property* (abridged ed.).
4 units, spring quarter (OSBORNE)
4 units, summer quarter (HOLBROOK)
Spring, 45; summer, 12

206. Real Property.—Tenure; estates in land with reference to: quantity, absolute and qualified character, time of enjoyment, number and connection of owners, creation and transfer, uses, marital interests. Acquisition of title by adverse possession, prescription, accretion. Natural rights; profits, easements, licenses. Aigler, *Cases on Titles;* Bigelow, *Cases on Rights in Land* (with Introduction), and selected cases.
4 units, winter quarter; 2 units, spring quarter (KIRKWOOD)
Winter, 63; spring, 57

SECOND- AND THIRD-YEAR COURSES

225. Contracts II.—Express conditions; defenses arising from breach of implied conditions, prevention, incapacitation, repudiation; excuses for nonperformance of conditions; anticipatory breach; discharge of contracts. The quasi-contractual rights related to the above topics and some other matters in quasi-contracts are studied. Williston, *Cases on Contracts* (2d ed.), and selected cases.
5 units, autumn quarter (WHITTIER)
Autumn, 37

226. Insurance.—Marine, fire, and life insurance. Insurable interests in various kinds of policies; concealments; misrepresentations; warranties and other matters affecting the validity of the contract; amount of recovery; subrogation; waiver, estoppel, election; powers of agents; assignees and beneficiaries. Vance, *Cases on Insurance.*
4 units (OSBORNE) [Not given in 1928–29]

227. Sales.—Subject-matter of the contract; transfer of property and title; destruction of the goods and risk of loss; obligations of seller and buyer; rights of unpaid seller against the goods, remedies of the seller on the contract; remedies of the buyer on the contract. Woodward, *Cases on Sales* (2d ed.).
6 units, autumn quarter (VERNIER)
Autumn, 38

228. Bills and Notes.—Negotiability; form and inception, form of bill and of note, acceptance, delivery, consideration, negotiation, transfer, holder in due course; liability of parties, maker and acceptor, drawer and indorser, transferor; discharge; effect of the Negotiable Instruments Law. Britton, *Cases on Bills and Notes.*
3 units, winter and spring quarters (VERNIER)
Winter, 56; spring, 50

229. Security.—A study of the various security devices including mortgages, both real and personal, conditional sales of chattels, and trust receipts; liens and pledges of personal property, mechanics' liens, suretyship and guaranty. Case book to be announced.
4 units, autumn and winter quarters (OSBORNE)
Autumn, 55; winter, 40

231. Bankruptcy.—Who may be a bankrupt; who may be petitioning creditors; acts of bankruptcy; what property passes to the trustee; provable claims; duties and powers of the bankrupt and his trustee; protection, exemptions, and discharge. Williston, *Cases on Bankruptcy.*
4 units, summer quarter (HOLBROOK)
Summer, 14

232. Partnership.—Nature of a partnership, its purposes, and members; creation of partnerships; nature of partner's interest; firm name and goodwill; mutual rights and duties of partners; actions between partners, at law and in equity; powers of partners; liability for acts of partners in contract and tort; general liability of partners; dissolution and notice; consequences of dissolution; dissolution agreements respecting debts; distribution of assets to creditors, and between partners; limited partnerships. Case book to be announced.

4 units, summer quarter, first half (8 recitations weekly) (OWENS)
Summer, 20

233. Private Corporations.—The nature of a corporation; promotion of corporations; corporate powers; corporate liability for torts and crimes; unauthorized corporate action, including doctrines of *de facto* corporations, and *ultra vires* acts; officers, stockholders, and creditors of corporations; reorganization of corporations. Warren, *Cases on Corporations* (2d ed.).

3 units, winter and spring quarters (OWENS)
Winter, 60; spring, 56

234. Admiralty.—The principles of admiralty and maritime law, as applied in the United States; the scope and subject-matter of admiralty jurisdiction; effect of state law; maritime liens; rights of maritime workers; carriage of goods; charter parties; salvage; general average; collision; limitation of liability. Lord and Sprague, *Cases on Admiralty*, and selected cases.

4 units, autumn quarter (MORRISON)
3 units, summer quarter (LORENZEN)
Autumn, 26; summer, 4

235. Agency.—Nature of the relation; appointment; liability of principal for agent's torts and contracts; liability of agent to third parties; principal's duties to agent, including workmen's compensation legislation; delegation; undisclosed principal; termination; ratification. Wambaugh, *Cases on Agency* (2d ed.), and selected cases.

5 units, summer quarter (SEARS)
Summer, 12

236. Workmen's Compensation.—This course is designed to familiarize the student with the necessary common law background and give an adequate conception of the scope and application of modern compensation legislation. A detailed study of the California Act from selected cases and statutory material is made.

1 unit, spring quarter (SHEPHERD)
Spring, 13

240. Conveyancing.—Execution of deeds; description of property conveyed; creation of incorporeal interests, rents; covenants as to use and as to title; estoppel by deed; priorities. Aigler, *Cases on Title to Land;* Bigelow, *Cases on Rights in Land.*

5 units, spring quarter (KIRKWOOD)
Spring, 43

241. Wills.—Devolution of property of a decedent by intestate succession. The nature of wills and testaments. Probate and its effect. Testamentary capacity. Testamentary intent. Effect of fraud, undue influence, or mistake on the validity of a will. Formalities essential to execution of a valid will. Incorporation by reference. Nullification of wills by (1) revocation; (2) ademption or lapse of legacies or devises; (3) by other circumstances.

Republication of wills. Prerequisite: Law 206, Real Property. Gray, *Cases on Property*, Vol. IV (2d ed.), and selected cases.
4 units, autumn quarter (BINGHAM)
4 units, summer quarter (SEARS)
Autumn, 29; summer, 16

242. Future Interests.—Classification of future interests: rights of entry for condition broken; escheat and possibilities of reverter; reversions, vested remainders and executory interests; contingent remainders; limitations to classes; freehold interests subject to a term; rule in Shelley's Case; future interests in personal property; construction of limitations; powers; the rule against perpetuities; illegal conditions and restraints on alienation. Prerequisite: Law 206, Real Property. Kales, *Cases on Future Interests.*
3 units, autumn quarter; 2 units, winter quarter (OSBORNE)
Autumn, 10; winter, 9

243. Water Rights.—An intensive study of water rights in the Western States. Extent of riparian rights and liberties; the law of prior appropriation; relative priorities of riparian and non-riparian rights and liberties of use; extinguishment of riparian rights; rights in diffused and underground waters; rights in interstate streams; federal and state powers of control. Prerequisite: Law 206, Real Property. Bingham, *Cases on Water Rights.*
4 units (BINGHAM) [Not given in 1928–29]

244. Mining Law.—A course on mining titles under the federal mining acts, with especial reference to mining rights in the Western States and Alaska. Prerequisite: Law 206, Real Property. Costigan, *Cases on Mining Law.*
4 units (BINGHAM) [Not given in 1928–29]

246. Equity.—I. The general nature and scope of Equity—Injunctions: historical introduction; the powers of courts of equity; principles governing the exercise of equitable powers. II. Specific performance of contracts: general scope of the remedy; fulfillment of conditions, express and implied; part performance and the Statute of Frauds; equitable conversion by contract; misrepresentation, mistake, and hardship as defenses to specific performance. Cook, *Cases on Equity* (one volume edition).
4 units, autumn quarter; 2 units, winter quarter (KIRKWOOD)
4 units, summer quarter, first half (8 recitations weekly) (KIRKWOOD)
Autumn, 50; winter, 45; summer, 16

247. Trusts.—The Anglo-American system of uses and trusts. Nature of a trust; other sorts of interests and relations distinguished; the creation, transfer, and extinguishment of trust interests, express, resulting, and constructive; validity of trusts; effect of statutes; charitable trusts; priorities and relative validity of competing equities; importance of the legal title to one claiming adversely to a trust or other equitable interest; remedies of creditors against the trust property; duties of the trustee. Prerequisite: Law 246, Equity. Scott, *Cases on Trusts.*
3 units, winter and spring quarters (BINGHAM)
Winter, 32; spring, 32

250. Code Pleading.—The civil action; splitting and joining actions; the complaint, including the caption, the statement of facts, and the prayer for relief; the answer, including general and specific denials, affirmative defenses and counterclaims; the demurrer; the reply; motions; bills of particulars; amendment and aider; construction of pleadings. Selected cases.
4 units, spring quarter (CATHCART)
4 units, summer quarter, second half (8 recitations weekly) (CATHCART)
Spring, 46; summer, 25

251. Evidence I.—This course deals with certain procedural and substantive law topics commonly considered in connection with evidence though not strictly a part of that subject. They are: judicial notice; functions of court and jury; presumptions; burden of proof; the parol evidence rule including construction of instruments. Thayer, *Cases on Evidence* (Maguire's ed.).
3 units, winter quarter (SHEPHERD)
Winter, 17

252. Evidence II.—Introductory topics; witnesses including competency, privilege, examination, impeachment, and rehabilitation; conjectural evidence; character evidence; hearsay and the exceptions to its exclusion; opinion; real evidence; proof of execution of writings; the "best evidence" rule. Thayer, *Cases on Evidence* (Maguire's ed.), and selected cases.
3 units, winter and spring quarters (WHITTIER)
Winter, 47; spring, 47

253. Practice.—Procedural problems confronting the lawyer in the commencement and prosecution of civil actions, omitting the subjects of pleading and evidence. The problems are studied as nearly as possible in the order in which they arise in practice. A Court is organized at the beginning of the course in which students are given practice in the institution and conduct of civil actions, including preparation and service of pleadings, summons, notices, etc.; writs, the making of motions; argument on law and motion matters, setting case for trial, and trial of case before a jury; appeal. Probate and administration proceedings in an estate are also conducted. In connection with the development of the proceedings in Court the following subjects are studied: necessity for a cause of action, statutes of limitation; parties to actions, venue; jurisdiction; methods of obtaining judgments without formal action in court; process; appearance; provisional remedies; motions; trial; verdict; judgment; execution; costs; new trial; appeal. Owens, *Forms and Suggestions for California Practice.*
3 units, autumn, winter, and spring quarters (OWENS)
Autumn, 40; winter, 37; spring, 34

254. Legal Ethics.—History of the legal profession; the lawyer's qualifications; admission and discipline of lawyers; ethical duties of the lawyer to the courts, the public, clients, etc.
2 units (OWENS) [Not given in 1928–29]

255. Damages.—Respective functions of court and jury in estimating damages; exemplary, liquidated, nominal, direct, and consequential damages; avoidable consequences; counsel fees; certainty, compensation, damages for non-pecuniary injuries; values; interest; and damages in certain actions of tort and contract. Beale, *Cases on Damages.*
3 units, spring quarter (SHEPHERD)
Spring, 18

256. Persons and Domestic Relations.—Infants; period of infancy; infants' contracts and conveyances, torts, and crimes. Husband and wife; rights of husband as to wife's property; rights of each as to earnings, services, and society of the other; husband's interest in damages for tort to wife; husband's liability for torts or contracts of wife; husband's duty to support wife and wife's authority to bind husband by her contracts; married women's contracts, conveyances, and devises; estoppel of married women; liability of married women for torts and responsibility for crimes; contracts, conveyances, and suits between husband and wife; husband's right

to custody of wife. Marriage: promise to marry and breach; marriage as a contract or relation; annulment; divorce; separation. Woodruff, *Cases on Domestic Relations* (3d ed.).

4 units (VERNIER) [Not given in 1928–29]

257. Private International Law (Conflict of Laws).—A study of the influence which considerations of the jurisdiction of a state and considerations of foreign law have upon the decisions of courts in cases involving events or things or persons under foreign jurisdiction. The study includes particularly questions of the jurisdiction of states and of courts, of the effects of foreign judgments and decrees, of legal domicile, of divorce, and of actions for foreign wrongs; property interests, decedent's estates, torts, legal capacity, marriage, marital interests, and contracts. Beale, *Cases on Conflict of Laws* (larger edition).

3 units, autumn and winter quarters (BINGHAM)
6 units, summer quarter (LORENZEN)
Autumn, 36; winter, 35; summer, 24

270. Public International Law.—Nature of International Law; its relation to Municipal Law. International relations in time of peace; recognition and classification of states; jurisdiction on land and on the high seas; acquisition and transfer of jurisdiction; non-belligerent settlement of international controversies. International relations as modified by war; effect of war as between enemies; relations between belligerents and neutrals. Open to students in other departments on petition. Case book to be announced.

3 units, winter quarter (MORRISON)
Winter, 24

271. Constitutional Law I.—Preliminary topics: making and changing constitutions; functions of judiciary in enforcing constitutions; separation and delegation of powers; inter-governmental relations. Political rights. Personal and religious liberty. The Fourteenth Amendment: operation in securing civil rights; due process and equal protection of law as limitations upon procedure, police power, and taxation. In considering the police power somewhat special attention is given to public utility rate regulation. Hall, *Cases on Constitutional Law* (with supplement, 1926).

4 units, autumn quarter (CATHCART)
Autumn, 66

272. Constitutional Law II.—Protection to persons accused of crime; retroactive laws in civil cases; state laws impairing obligation of contracts; eminent domain. General scope of federal powers; foreign relations, Indians and aliens; territories, dependencies, and new states. Regulation of commerce: duties on imports, exports, and tonnage; interstate and foreign commerce; state legislation affecting national commerce; power of Congress; federal maritime authority. In connection with the power of Congress over commerce and as illustration of its extent some of the more important federal regulation statutes and especially the Sherman Anti-Trust Act are studied. Hall, *Cases on Constitutional Law* (with supplement, 1926); also selected cases.

4 units, winter quarter (CATHCART)
Winter, 57

273. Public Utilities.—The regulation and control of common carriers and other public service callings; entry and withdrawal; self-service and collateral business; duty to serve; adequacy and equality of service; dependent and connecting service; liability; limitation of liability. Smith and Dowling, *Cases on Public Utilities.*

3 units, winter and spring quarters (MORRISON)
Winter, 13; spring, 11

274. Municipal Corporations.—Nature; creation, alteration, and dissolution; legislative control; internal organization; powers; liability on contract and for torts; remedies. Case book to be announced.

4 units, autumn quarter (MORRISON)
4 units, summer quarter, second half (8 recitations weekly) (MORRISON)
Autumn, 37; summer, 8

275. Taxation.—This course deals with the legal aspects of taxation, including jurisdiction to tax; personal, property, excise, inheritance, and income taxes; assessment; exemptions; obligation of a tax; remedies for illegal taxation. Beale, *Cases on Taxation,* and federal income tax regulations.

4 units, spring quarter (MORRISON)
Spring, 14

276. Administrative Law.—This course is designed to give advanced students a general survey of the field of Administrative Law. The principles considered, with special emphasis on their application to practical modern problems, are: separation and delegation of powers; validity and effect of administrative regulations and quasi judicial determinations; jurisdiction and conclusiveness; administrative discretion; relief against administrative action, compensatory and specific, against public officers and the state; the extraordinary legal remedies and equitable jurisdiction in public law. Freund, *Cases on Administrative Law,* and selected cases.

4 units, winter quarter (SHEPHERD)
Winter, 19

280. Problems in Administrative Law.—This course is conducted as a seminar and consists of an intensive study of some phase of administrative law. Its sole aim is to give properly prepared students opportunity to do on their own initiative a constructive and original piece of research. The work is open only to a limited number of advanced students who have had or are taking the course in Administrative Law.

Spring quarter (SHEPHERD) By arrangement
Spring, 4

282. Problems in Administration of Civil Justice.—Individual study of special problems and written reports upon them under instructor's supervision; group discussions and individual consultations. Problems are chosen by students with instructor's assent from such fields as: court organization; special courts; selection, tenure, and compensation of judges; functioning of the bar; reform of the jury, of pleading, of the rules of evidence, of trial and appellate procedure; costs; legal aid; arbitration and conciliation; proper control of procedure; uniformity; the history of procedure. Open to law graduates and to third-year law students by consent of the instructor.

Autumn, winter, and spring quarters (WHITTIER) [Not given in 1928–29]

283. Problems in Administration of Criminal Justice.—Individual study of one or more problems in the general field of criminal law. Problems to be selected, with approval of the instructor, from such fields as: aliens, immigration, appeals, bail, capital punishment, child labor, classification of crimes, confessions, "third degree," corporal punishment, courts, problems of substantive law, such as insanity, self-defense, etc., causes of crime, prevention of crime, detection of crime, drug addiction, drunkenness, eugenics, experts, extradition, grand jury, heredity, homicide, indeterminate sentence, indictment, jails, former jeopardy, jury, juvenile courts, justice of peace, lynching, negroes, moving pictures, parole, penal farms, police, prison aid, prisons and reformatories, probation, procedure, prosecuting attorney, prostitution, psychology, psychopathic laboratories, public defender, recidi-

vists, statistics, statutes, sterilization, suicide, surveys, etc. The course is designed to offer the student an opportunity to do independent work of a research character. Weekly consultation for reports and guidance. Final written report. Open to law graduates and to well-prepared third-year law students by consent of instructor.

Winter and spring quarters (VERNIER) [Not given in 1928–29]

284. Problems in Practice.—Special problems not covered in the regular course in Practice are worked out by the student under the guidance of the instructor. The time assigned for class work is devoted to group and individual consultations. While in general the problems are assigned by the instructor, students may submit problems they may be particularly interested in, and, if approved, may devote their time to their development.

Winter and spring quarters (OWENS) By arrangement
Winter, 1; spring, 2

285. Principles of the Roman and Modern Civil Law.—A consideration of some of the important principles and conceptions of the Roman Law and modern Civil Law systems as contrasted with those of the Common Law. Reading material to be announced.

3 units, spring quarter (OSBORNE)
Spring, 9

286. Jurisprudence.—Nature and purpose of jurisprudence; schools of jurisprudence; the end of law; its nature; its sources, forms, and modes of growth; its scope and subject-matter; analysis of fundamental legal conceptions; critique of existing law. Assigned readings.

Winter and spring quarters (BINGHAM) By arrangement
Winter, 3; spring, 3

EXTRA COURSES

Legal Bibliography and Brief Making.
Autumn quarter (BRENNER)

Ethical Problems of a Lawyer.
Winter quarter (CUSHING) [In alternate years; given in 1928–29]

Patent Law.
Winter quarter (LYON) [In alternate years; not given in 1928–29]

Special Topics in Practice.
Spring quarter (HILL)

SCHOOL OF LETTERS

Augustus Taber Murray, Professor of Classical Literature, *Chairman of the Council*
Samuel Swayze Seward, Jr., Associate Professor of English, *Secretary of the Council*

ORGANIZATION

The School of Letters includes the following departments and subjects: Classical Literature (with which are at present grouped the courses in Hebrew), English, Germanic Languages, Romanic Languages, and Slavic.

The School is administered through the Council of the School of Letters, composed of those members of the staff of instruction who are also members of the Academic Council.

THE BACHELOR'S DEGREE

High-school students looking forward to entering the School of Letters are urged to begin as early as possible the study of one ancient and one modern language and also to consult the Chairman of the School, either personally or by letter, at any time, with regard to meeting the conditions for entrance.

Students who have completed the work of the Lower Division and propose to make language and literature the principal element in their program for the junior and senior years may, upon furnishing satisfactory evidence of their fitness to do such work, be enrolled as candidates for the bachelor's degree. Two programs of study are available:

I. Those who plan to specialize will elect one of the constituent departments in which to do their major work. Such students should consult the announcement of the department in question for prerequisites and requirements. On registration day they will present their credentials to the executive head of the department, or his representative, and will, if accepted as candidates, make out and file, with his approval, a list of studies for the ensuing quarter. On satisfactory completion of the requirements laid down in the announcement of the chosen department, these students will be recommended for the degree of Bachelor of Arts in, for example, English.

II. Students who prefer to range over a somewhat wider field of studies will be permitted, if duly qualified, to enroll as candidates for the degree of Bachelor of Arts in the School of Letters. Applicants for such candidacy will present their credentials to the Chairman of the Council for his approval, on registration day. They must possess a reading knowledge of one ancient and one modern language represented in the School. In the case of one of these languages the fulfillment of the requirement may be postponed until after entrance into the School, provided that the applicant possesses a reading knowledge of two ancient or two modern languages. Thus, an applicant who offers, for example, either (*a*) French and German, or (*b*) Greek and Latin, can satisfy the requirements for graduation as outlined below, by electing (*a*) English, French, and German, or (*b*) English, Greek, and Latin, but must in addition acquire a reading knowledge of one ancient or one modern language, as the case may be, before the end of the senior year. Successful applicants will enroll with the Chairman, choose an adviser from among the members of the Council, communicate such choice

in writing to the Chairman, and file with him a copy of a program of studies bearing the adviser's endorsement.

Candidates for the degree of Bachelor of Arts in the School of Letters will elect one of the two following schemes of study, either of which, when satisfactorily completed, will entitle the applicant to recommendation for the degree:

A. The student carries on work in a group of at least three literatures represented in the School, attending courses and meeting such tests as are imposed upon all who seek credit for such courses. Thirty units of such credit are required in one literature and fifteen units in each of two others. Only Upper Division courses will be accepted in fulfillment of this requirement, and in these courses only such work will receive credit as involves a reading knowledge of the languages concerned.

B. As an alternative to the course outlined above, students may take the degree of Bachelor of Arts by fulfilling the following requirements:

1. Two years' residence as Upper Division students.
2. At least 30 units of work in courses (freely elected).
3. Passing the following examinations:

a) Language examinations.—Examinations (1) in either Greek or Latin, (2) in one modern foreign language. These examinations are on books previously designated and on "unseens." They will test the student's ability to translate accurately and elegantly, and to interpret the passages given. The credit value of these examinations is twenty-four units. The following books have been designated for the language examinations for the academic year, 1928–29:

Greek: Plato's *Republic,* Books I and II; Homer, *Odyssey,* Books X–XII; Thucydides, Book II, 1–64.

Latin: Cicero, *Selected Letters* (edition of W. W. Howe); Virgil, *Georgics* II and IV.

French: Racine, *Phèdre;* Balzac, *Eugénie Grandet.*

German: Selections from the prose writings of Lessing and Herder. (For editions, consult the department.)

Italian: Ariosto, *Selections* in Ford's *Romances of Chivalry);* Manzoni, *I Promessi Sposi,* chapters 1–8.

Russian: Pushkin, *The Captain's Daughter,* 1 3, *Eugene Onagin,* Book I; Turgenev, *Prose* (Kegan Paul's Russian Texts).

Spanish: Echegaray, *El Gran Galeoto;* Benavente, *Los intereses creados.*

b) Examination in literature.—An examination on the history and literature of some well-marked period, such as English literature under Elizabeth. The credit value of this examination is twenty-four units.

c) Special papers.—Essays on three authors, one ancient, and two modern, of whom only one shall be English. For the preparation of one of these essays the student will be given at least a month's time; the subjects of the other two will not be given out until three days before the essays are due. A list of the authors chosen must be approved at least one quarter before the examination is taken. The combined credit value of these papers is twelve units.

By the end of his junior year the candidate is expected to have completed enough work (either in courses or by passing examinations) to secure senior standing.

The examining committee will grade the candidates' papers in the usual way and submit the grades to the Registrar's Office. Students taking the degree by examination may receive graduation honors.

Most of the work of preparation for the examinations can be carried on in connection with courses, by doing special reading, submitting essays, etc.; but it should be clearly understood that the examinations are on *subjects*, not courses, and may involve matters not discussed in any course. Further information describing the examinations in greater detail may be obtained from the Chairman of the School.

TEACHERS' CERTIFICATES

No provision is made for granting teachers' certificates in the field of Letters as distinct from the fields covered by the constituent departments. For information regarding requirements students are referred to the *Announcement of the School of Education.*

BIBLICAL HISTORY AND LITERATURE

DAVID CHARLES GARDNER, Chaplain

The Background of Christianity.—A study of the development of the religious beliefs and ethical ideals of the Old Testament. A review of the main facts of the life of Jesus as found in the four gospels and an analysis of the principles of Christian ethics.

2 units, autumn and spring quarters (GARDNER) TTh 11
Autumn, 37; spring, 46

[**English Bible.**—See English 24.]

CHINESE

OBED SIMON JOHNSON, Instructor

1. Elementary Kuan-Hua.—An introductory study of Kuan-Hua. This is the language spoken by the officials of China. It is also the common language of two-thirds of China's population. The rudiments of the language are first of all carefully studied. This is followed by progressive exercises in speaking, reading, writing, and translation from Chinese into English, and from English into Chinese.

3 units, autumn quarter (JOHNSON)
Autumn, 5

2. Elementary Kuan-Hua (continued).
3 units, winter quarter (JOHNSON)
Winter, 2

3. Elementary Kuan-Hua (continued).
3 units, spring quarter (JOHNSON)
Spring, 3

[**History of China.**—See History 171.]

[**Modern China.**—See History 172.]

[**History of Chinese Civilization.**—See History 173.]

CLASSICAL LITERATURE

HENRY RUSHTON FAIRCLOUGH, JEFFERSON ELMORE, Professors Emeritus

†AUGUSTUS TABER MURRAY, BENJAMIN OLIVER FOSTER, ERNEST WHITNEY MARTIN, Professors
ANNA COX BRINTON (Earlham College), Acting Professor (Summer Quarter)
RAYMOND DAVIS HARRIMAN, Associate Professor
HAZEL DOROTHY HANSEN, Instructor
HERBERT H. POWELL, Lecturer
MARY WEBSTER KRAEMER, ROBERT HENRY WILSON, Assistants in Instruction

The Department of Classical Literature has for its aim the interpretation in the broadest sense of the civilizations of Greece and Rome. It accepts as major students those who desire training in Greek and Latin as a preparation for graduate work either in this University or elsewhere, or who wish to secure teachers' certificates in the classical languages, and also those who, without intending to specialize in Greek or in Latin, wish to make their work in the University conform to the traditional arts course. The student is free to make his major work Greek or Latin at will.

Students who have had no Greek before entering the University may begin their study of the language in any quarter in introductory courses which are open to students in all departments of the University. Students who offer Greek on entrance will be registered in classes adapted to their needs.

In addition to the courses in the Greek and Latin languages, the department offers courses in Classical Literature, History, Archaeology, Art, and allied subjects, which, as indicated below, may be taken by major students as a part of their required work, but which presuppose no knowledge of the Greek and Latin languages, and are open, unless otherwise stated, to students in all departments of the University.

Under the auspices of this department, courses are also offered in elementary and advanced Hebrew and Aramaic.

Graduation.—The department offers three majors with a normal requirement of forty-five credit units, as follows: (1) Classical Literature, Greek; (2) Classical Literature, Latin; and (3) Classical Literature. For the first of these the student must have completed thirty units in courses in the Greek language plus fifteen units in the general courses offered by the department (or in courses selected from both Latin and general courses); for the second, thirty units in courses in the Latin language (beyond Course B3) plus fifteen units from the general courses (or in courses selected from both Greek and general courses); and for the third, either thirty units in courses in the Greek language plus fifteen units in Latin, or thirty units in Latin plus fifteen units in Greek.

Teacher's Certificate.—The completion of the major requirements for graduation includes the department recommendation for the teacher's certificate, provided that the Teachers' Course in the language chosen has been included in the work offered. Students in other departments who wish to

† Absent on leave, autumn and spring quarters.

secure a teaching major or minor in Latin or Greek should consult some member of the department.

Advanced Degrees.—The department offers to graduate students courses leading to the degrees of Master of Arts and Doctor of Philosophy. Candidates for the Master's degree who have had the requisite undergraduate training may ordinarily receive the degree in one year on satisfactory completion of the required courses and of a thesis indicating ability to make independent use of sources. For the Doctor's degree the ability to read French and German is necessary, and the course requires a minimum of three years' work.

Candidates for the Doctor's degree may pursue their work here to advantage. The University Library is well supplied with the ordinary literature and is equipped with complete sets of virtually all the philological journals. It also possesses the Minton Warren collection of books and papers on Terence and has adequate material for the study of epigraphy and palaeography.

Attention may be called to the general courses offered in Greek and Roman History (C1–6), Greek and Roman Literature (C20–46), and Classical Art and Archaeology (C50–52). These may be of special benefit to advanced students, who are naturally best equipped for taking advantage of them. The course in Mediaeval Latin (B145) is also recommended to graduate as well as undergraduate students.

A. GREEK COURSES

A1. Elementary Greek.—Introduction to Greek through Attic prose. Essential forms; elements of Greek syntax; word-lists from Xenophon; writing of simple sentences; dictation; reading of easy Greek prose.

3 to 5 units, each quarter (MURRAY, HANSEN) MWF 8
Autumn, 4; winter, 7; spring, 6; summer, 7

A2. Reading of Simple Greek.—Review of Greek grammar with reading of selections. Open to those who have had A1, or an equivalent.

3 units, each quarter (MARTIN, HANSEN) By arrangement
Autumn, 8 (2 sections); winter, 3; spring, 3; summer, 3

A3. Xenophon.—Reading of selections from Xenophon and of Cebes' *Tablet.*

3 units, winter and spring quarters (MARTIN, HANSEN) [Not given in 1928–29]

A4. Introduction to Homer.—Rapid reading of selected books of the *Odyssey.*

3 units, autumn, *spring, and *summer quarters (MURRAY, HANSEN)
Autumn, 4; spring, 8; summer, 1

A4b. Homer (continued).—Further reading of *Iliad* and *Odyssey,* with discussions of Homeric topics.

3 units, winter quarter (MURRAY, HANSEN) By arrangement
Winter, 7

A5. Plato.—Systematic review of Greek syntax; practical exercises written and oral; reading of Plato's *Apology* and *Crito.*

3 units, winter quarter (MURRAY) [Not given in 1928–29]

A13. Individual Work.—Students and instructors meet each week for free reading in Greek suited to the needs of the individual.

1 to 3 units, each quarter (MURRAY, MARTIN, HANSEN) By arrangement
Autumn, 5; winter, 4; spring, 9 (3 groups); summer, 4

A14. Prose Composition.—Exercises adapted to the particular needs of the individual student.

2 units, each quarter (MURRAY, MARTIN, HANSEN) By arrangement
Autumn, 3; winter, 7; spring, 1

[NOTE.—Three courses (9 or 15 units) chosen from Courses A1–14 with reference to the student's taste and preparation constitute the first year's work in Greek for those who have had no Greek before entering college, and may be counted toward the fulfillment of the foreign-language requirement of the Lower Division. Where possible, it is strongly urged that this work be accomplished during the first two years of residence, especially by those who plan to become Greek majors in Classical Literature.]

A54. Introduction to Greek Tragedy.—The *Alcestis* of Euripides.
3 units, winter quarter (MURRAY)
Winter, 12

A55. Greek Comedy.—Selections from Aristophanes and Menander. Open to qualified students.
3 units, autumn quarter (MARTIN) By arrangement
Autumn, 4

A101. Æschylus.—Reading of *Prometheus Bound* and *Agamemnon;* lectures.
3 units, spring quarter (MARTIN) By arrangement
Spring, 4

A104. Plutarch.—Reading of selections.
3 units, autumn and winter quarters (MARTIN) By arrangement
Autumn, 5; winter, 7

A110. Theocritus.—Reading of the idylls in Greek and a survey of pastoral poetry in ancient and modern literature.
2 units, spring quarter (MURRAY) [Not given in 1928–29]

A111. Pausanius.—Reading of Book I. Study of the topography and monuments of ancient Athens.
3 units, summer quarter (HANSEN) MWF 10
Summer, 3

A112. New Testament.
2 units, autumn, winter, and spring quarters (MARTIN) By arrangement
Autumn, 7; winter, 6; spring, 1

A113. Individual Work.—For advanced students.
2 to 4 units, summer quarter (MURRAY) By arrangement
Summer, 3

A200. Teachers' Course.—Lectures on methods, with practical training.
2 units, spring quarter (MARTIN) By arrangement
Spring, 1

A203. Arrian.—Reading of the *Anabasis,* with a study of the campaigns of Alexander.
2 units, autumn and winter quarters (MARTIN) [Not given in 1928–29]

A204. Lucian.—Reading of selections.
2 units, spring quarter (MARTIN) [Not given in 1928–29]

A279. Greek Seminary.—Graduate students and advanced major students meet each week for the reading of Homer and the discussion of papers and reports presented by the members.
2 to 4 units, winter, spring, and summer quarters (MURRAY, MARTIN) By arrangement
Winter, 1; spring, 1; summer, 3

A280. Greek Seminary.—*Republic of* Plato.
2 to 4 units, spring quarter (MURRAY) By arrangement
Spring, 3

A290 (B290). Thesis Work.
4 units, summer quarter (MURRAY) By arrangement
Summer, 1

B. LATIN COURSES

B1. Introduction to Latin.—Grammar and exercises. For students who have had no Latin. May be taken (with B2–B6) in fulfillment of the foreign-language requirement of the Lower Division.
5 units, autumn quarter (WILSON) MTWThF 1:05
Autumn, 5

B2. Introduction to Latin (continued).—Reading of easy prose, exercises in composition, Caesar begun.
5 units, winter quarter (———) [Not given in 1928–29]

B3. Introduction to Latin (concluded).—Caesar's *Gallic War,* Books I–IV, or selections from the Gallic and Civil Wars; exercises in composition.
5 units, spring quarter (———) [Not given in 1928–29]

B4. Cicero.—Selected *Orations.* Open to students who have had two years of high-school Latin. May be taken (with B5 and B6) in fulfillment of the foreign-language requirement of the Lower Division.
3 units, autumn quarter (HARRIMAN) MWF 11
Autumn, 3

B5. Virgil.—Selected books of the *Aeneid.* Open to students who have had two years of high-school Latin.
3 units, winter quarter (HARRIMAN) MWF 9
3 units, summer quarter (KRAEMER) MWF 1
Winter, 8; summer, 5

B6. Virgil.—*Aeneid.*
3 units, spring quarter. (FOSTER) MWF 11
Spring, 4

B13. Individual Work.
2 units, autumn quarter (WILSON) By arrangement
Autumn, 2

B14. Terence and Cicero.—The *Andria* of Terence and the *De Senectute* of Cicero. Open to those who have had four years of high-school Latin or have taken B4–6.
4 units, autumn quarter (FOSTER) MTWTh 9
Autumn, 8

B15. Horace.—Selections from the *Odes* and *Epodes.* Open to those who have had four years of high-school Latin or have taken B4–6.
3 units, winter quarter (HARRIMAN) MWF 9
Winter, 5

B16. Catullus and Tibullus.—Open to those who have had four years of high-school Latin or have taken B4–6.
3 units, spring quarter (FOSTER) MWF 9
Spring, 7

B18. The Younger Pliny.—Selections from the letters; collateral reading on the life and manners of the age. Open to those who have had at least four years of Latin.
3 units, summer quarter (BRINTON) MWF 11
Summer, 4

B29. Prose Composition.—Open to those who have had four years of high-school Latin, or have taken Courses B4–6.
2 units, autumn quarter (HARRIMAN) TTh 9
Autumn, 3

B40. Horace.—*Satires* and *Epistles.* Open to those who have had B14–16 or an equivalent.
3 units, autumn quarter (FOSTER) MWF 10
Autumn, 9

B41. Tacitus.—*Histories, Book I, Galba, Otho,* and *Vitellius.* Open to those who have had B14–16, or an equivalent.
3 units, winter quarter (FOSTER) MWF 8
Winter, 3

B124. Juvenal and Martial.—The first, third, and tenth satires of Juvenal, and selected epigrams of Martial. Open to those who have had two years of college Latin.
5 units, summer quarter (———) [Not given in 1928–29]

B136. Roman Comedy.—The *Captivi* and *Rudens* of Plautus, and either the *Trinummus* of Platus or the *Phormio* of Terence. Open to those who have had two years of college Latin.
3 units, spring quarter (FOSTER) [Not given in 1928–29]

B138. Apuleius.—Selections from the *Metamorphoses.*
5 units, spring quarter (———) [Not given in 1928–29]

B145. Mediaeval Latin.—Reading of representative texts with informal discussions. Intended for Latin students interested in the later development of the language and for students of English and history working in the mediaeval field.
3 units, spring quarter (———) [Not given in 1928–29]

B200. Teachers' Course.—Lectures and conferences on methods of teaching Latin. Open only to advanced students.
2 units, spring quarter (HARRIMAN) TTh 11
Spring, 6

B216. Lucretius.—Selections from the *de Rerum Natura,* with informal discussions of the Epicurean philosophy and the art of Lucretius.
5 units, winter quarter (FOSTER) MTWTh 11
Winter, 7

B225. Latin Epigraphy.—Lectures, with practice in the reading of inscriptions and in the use of the Corpus. Primarily for graduate students.
2 units, winter quarter (MARTIN) W 2–4
Winter, 2

B230. Latin Palaeography.—The ancient and the mediaeval book, with practical exercises in the reading of facsimiles.
2 units, spring quarter (FOSTER) [Not given in 1928–29]

B278. Introduction to Textual Criticism and Interpretation.—Caesar's *Commentaries on the Gallic War* is used as the basis for various practical exercises. Open to qualified graduates.
5 units, autumn quarter (FOSTER) TTh 2:30
Autumn, 4

B279. The First Decade of Livy.—An introduction to the study of Livy's style, with some practice in text-criticism and interpretation. Open to qualified graduates.
5 units (FOSTER) [Not given in 1928–29]

B280. Tacitus.—The second half of the *Annals* is studied with special emphasis on style. Open to qualified graduates.
5 units (FOSTER) [Not given in 1928–29]

B281. Petronius.
5 units, spring quarter (HARRIMAN) MTWF 11
Spring, 9

B282. Roman Elegy.—Lectures on the development of elegiac poetry among the Greeks and Romans; reading and interpretation of the elegiac poems of Catullus, Tibullus, and Propertius. Open to qualified graduates.
4 units (FOSTER) [Not given in 1928–29]

B283. The Roman Epic.—A study of the *Aeneid*, with special reference to Virgil's sources and technique, and incidental consideration of earlier and later examples of the type in Latin literature.
3 to 5 units, summer quarter (BRINTON) MWF 10
Summer, 13

B285. Historical Grammar of Greek and Latin.
3 units, autumn and winter quarters (HARRIMAN) By arrangement
Autumn, 6; winter, 3

B290 (A290). Thesis Work.
By arrangement
Winter, 1

C. GENERAL COURSES

C1. History of Greece.—Outline course, from the earliest period to 30 B.C. Preliminary survey of the Mediterranean background. Open to all students.
3 units, autumn quarter (HARRIMAN) MWF 8
Autumn, 53

C5. History of Rome.—From the earliest times to the fall of the Western Empire. Development of Roman imperialism and the relation of the Empire to medieval and modern history. Open to all students.
3 units, spring quarter (HARRIMAN) MWF 8
Spring, 63

C6. History of Roman Civilization.—Study of the conditions of Roman life and comparisons with those of our own. Features of Roman civilization that have survived and influenced the present. Open to all students.
3 units, winter quarter (———) [Not given in 1928–29]

C9. The Greek Heritage.—A rapid survey of various phases of Greek civilization with some reference to the survivals of Greek culture in our own life and thought.
3 units, spring quarter (MARTIN) [Not given in 1928–29]

C13. Individual Work.
3 units, winter and spring quarters (MURRAY, MARTIN)
Winter, 1; spring, 23

C20. Greek Literature, Poets.—Lectures; reading in translations of selections from the greater Greek poets with some reference to their influence on later literature. Open to all students.
3 units, autumn quarter (MARTIN) MWF 11
Autumn, 55

C21. Greek Literature, Poets.—(Continued.)
3 units, winter quarter (MARTIN) [Not given in 1928–29]

C24. The Greek Epic.—Lectures on the poetry of Homer, with reading of both *Iliad* and *Odyssey* in English. Open to all students.
3 units, winter quarter (MURRAY) MWF 8
Winter, 81

C25. Greek Tragedy.—Lectures on the art of tragedy among the Greeks, with the study of selected plays in translation. Open to all students.
3 units, spring quarter (MURRAY) [Not given in 1928–29]

C37. Roman Literature of the Republic.
2 units, winter quarter (FOSTER) TTh 10
Winter, 22

C38. Roman Literature of the Empire.—Certain of the more important writers of the Augustan and post-Augustan periods. Lectures and assigned readings in English translations. Open to all students.
2 units, spring quarter (FOSTER) TTh 8
Spring, 11

C40. Ancient and Modern Tragedy.—A study of tragic themes treated both by ancient and modern artists. Open to all students.
3 to 5 units, summer quarter (MURRAY) MWF 11
Summer, 46

C44. Greek Myths.—The more important myths and legendary characters of early Greece are traced through Greek literature with some reference to their treatment in later literature. Lectures with assigned reading. Open to all students.
2 units, winter and spring quarters (MARTIN) TTh 11
Winter, 72; spring, 84

C45. Plutarch: The Greek Lives.—In English.
3 units, winter and spring quarters (MARTIN) MWF 11
Winter, 44; spring, 54

C46. Plutarch: The Roman Lives.—In English.
3 units, spring quarter (MARTIN) [Not given in 1928–29]

C50. Classical Archaeology: Greek Sculpture.—Lectures, illustrated with photographs and lantern slides. Open to all students.
2 units, autumn quarter (HANSEN) TTh 11
Autumn, 50

C50b. Classical Archaeology.—Illustrated lectures on Greek civilization with special reference to topography, architecture, coins, vases, etc. Open to all students.
2 units, winter quarter (HANSEN) TTh 11
Winter, 32

C51. Homeric Civilization.—Illustrated lectures on the civilization of the Bronze and Iron Ages in Greece. Limited to twelve students.
2 units, spring quarter (HANSEN) TTh 11
Spring, 13

C52. Roman Art and Archaeology.—Lectures illustrated with photographs and lantern slides. Open to all students.
2 units, summer quarter (BRINTON) TTh 11
Summer, 25

D. HEBREW COURSES

D1. Elementary Hebrew.—Introduction to Hebrew Grammar, word lists, verbs and nouns from strong roots, reading and analysis of the first chapter of Genesis.
2 units, winter quarter (POWELL) TTh 2:05
Winter, 1

D2. Elementary Hebrew (continued).—The weak verb. Vocabularies. Reading and analysis of Genesis, chapters 2–4.
2 units, spring quarter (POWELL) TTh 2:05
Spring, 1

D103. Advanced Hebrew.—General survey of grammar. Reading of Genesis, chapters 5–8, and other prose sections.
2 units, winter quarter (POWELL) TTh 3:05
Winter, 1

Courses will be offered in Advanced Hebrew Grammar, in Biblical Aramaic, in Syriac, and in Semitic Epigraphy to properly qualified students.

ENGLISH

MELVILLE BEST ANDERSON, Professor Emeritus

WILLIAM DINSMORE BRIGGS, HARDIN CRAIG, WILLIAM HAWLEY DAVIS (Editor, University Press), †HENRY DAVID GRAY, ALBERT LÉON GUÉRARD (General Literature), Professors

EDGAR COLBY KNOWLTON (Ohio Wesleyan University), Acting Professor (Summer Quarter)

HOWARD JUDSON HALL, ARTHUR GARFIELD KENNEDY, EDITH RONALD MIRRIELEES, FRANCES THERESA RUSSELL, SAMUEL SWAYZE SEWARD, JR., Associate Professors

HENNING LARSEN (University of Iowa), Acting Associate Professor (Summer Quarter)

MARGERY BAILEY, Assistant Professor

*CURTIS EDMUND AVERY, HARFORD HOLMES HAYS, GEORGE HENRY HINKLE, JOHN MCCLELLAND, ARTHUR YVOR WINTERS, Instructors

HOWARD WILSON BAKER, JR. (Spring Quarter), CHARLES ALEXANDER SISSON (Winter and Spring Quarters), Acting Instructors

MARY YOST (Dean of Women), Lecturer

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

1. The courses ordinarily prescribed in the major subject include Chaucer, Shakespeare (Courses 25 and 159), the advanced courses (181, 182, 183, 184, 185) in the history of English literature (five quarters), and an advanced course in Spenser, Milton, Wordsworth, or Browning, besides such preliminary courses in composition, vocal expression, or literature as may be advised in individual cases. In the advanced courses in English literature one of the two following substitutions may be made upon advice: (*a*) for Course 182, the course in Elizabethan Drama (170); or (*b*) for Course 183, the course in Modern English Fiction (168). (For the requirements in the case of students making English and Public Speaking their major subject, see below under the Division of Public Speaking.)

2. Each student is required also to pursue work in one foreign language and literature sufficiently to obtain (*a*) a practical reading knowledge of the language, and (*b*) some acquaintance with its most important literature. Students should be sure that their language studies are so planned as to accomplish these ends. The requirement is not primarily a matter of formal credit-hours, but ordinarily demands a minimum of 24 units of college work, aside from elementary courses (two years in the high school or one in the university). Introductory courses in Latin and Greek, if pursued in the university, will be counted as college work. Those who make Latin or Greek their principal language are advised, in general, to include two years of work in a modern language among their elective studies; and those who have chosen a modern language are encouraged to include among their elections two years of work in Latin or Greek.

3. A course in English history is also prescribed for those who have not had a separate course in the subject in the high school. It should be taken before the junior year.

† Absent on leave, autumn, winter, and spring quarters.
* Absent on leave, winter and spring quarters.

Certain courses (such as 21 and 168, 14, 23, and 27), which cover more or less of the same ground, may not be elected by the same student without consultation with the instructors.

Students in junior colleges, who expect to transfer to the Upper Division as English majors, are advised while in junior college to take a full course in English history, and to pursue the study of a foreign language. They are also advised to take an elementary survey course in Shakespeare.

Lower Division students who plan to work in English under the Independent Study Plan should consult the major department early for detailed requirements.

GENERAL AND COMPARATIVE LITERATURE

Besides courses in English and American literature the English department offers courses in general literature, as follows: 15, 24, 139, 167, 169, 171, 196*a*, 196*b*, 196*c*, 197, 203, 204, 206, 207, 208. In these courses the language of instruction is English, and the reading may be done in English. But the field of study is not limited by linguistic or national boundaries. It comprises: (1) literary problems of a general character, (2) the mutual influences of national literatures, and (3) masterpieces of world literature. The following courses, given in English by other departments, afford a survey of world literature: Classical Literature courses in Group C; Germanic Languages 193; Romanic Languages A140, C140, C150, E202; Slavic Literature C1, C100, C101, C102, C103, C104, C105.

THE TEACHER'S RECOMMENDATION

Students wishing to obtain certificates entitling them to teach in the junior high schools or the high schools of California should consult the *Announcement of the School of Education*. In that pamphlet are set forth not only the general requirements laid down by the State Board of Education, but also the specific requirements on the basis of which properly qualified students may apply for the recommendation in English, as a major or a minor subject.

ADVANCED DEGREES

Eligibility.—Anyone may enter upon graduate work at Stanford University, with the intention of becoming a candidate for a higher degree in English, who has received a Bachelor's degree from any college or university of accredited standing. But it is not advisable for a student whose undergraduate work has not included a thorough training in English to undertake graduate work in this department, unless he is prepared to give more than the minimum time of residence. By "a thorough training in English" is meant the equivalent of the requirements for the degree of Bachelor of Arts in English at Stanford. See below under "Examinations."

Time of Residence.—Three quarters of full-time work at Stanford, or the equivalent in part-time work during a longer period, are required for the degree of Master of Arts.

Three years of full-time work or their equivalent are required for the degree of Doctor of Philosophy. Of these, one full year other than the first must be at this University.

While no definite number of units is required of graduate students, twelve or thirteen units per quarter is regarded as constituting a normal

amount of work. The nature of the courses selected will determine the number of courses which it will be advisable to choose. Not less than two-thirds of the courses taken must be graduate courses in the English Department. The remaining third may consist of graduate or of Upper Division courses in any department, subject to the approval of the major professor. A graduate student registered in any English course numbered between 100 and 190 must, if the course is to be counted as a graduate course, be assigned by the instructor additional work of a genuinely graduate character.

Except under extraordinary circumstances, it is not possible to secure both the Teacher's Recommendation and the degree of Master of Arts in one year of graduate study. The courses required by the School of Education make it impossible to devote the necessary proportion of time to English. But in some cases, where certain requirements of the School of Education have been met in advance, it has been found possible to secure the Master's degree by an additional quarter of study. The summer quarter provides for such students the opportunity for securing both the Master's degree and the Teacher's Recommendation.

Language Requirements.—A candidate for the degree of Master of Arts must have an elementary knowledge of Old English, which can be secured by electing the course in Old English while at Stanford, and a reading knowledge of two foreign languages (preferably one ancient and one modern).

A candidate for the degree of Doctor of Philosophy must have a reading knowledge of Latin, German, and French adequate for the accurate comprehension of technical articles in the student's special field of study.

Before he is eligible to take his Doctor's examination the candidate must secure from his major professor a written statement that he has satisfied the foreign-language requirement.

Application for Candidacy.—Candidates for the degree of Master of Arts must make out, in consultation with their major professor, a program of courses constituting a full year's work. This should be done during the first four weeks of the quarter preceding that in which the degree is to be granted. In addition to the courses taken and to be taken, the application for candidacy must include the subject of the thesis.

Candidates for the degree of Doctor of Philosophy should file their application for candidacy during the year preceding that in which the degree is to be granted. This application includes the full program of the three years' study and the subject of the dissertation.

Changes in the title of the thesis or dissertation or in the program of study may be made with the consent of the major professor and the approval of the Graduate Study Committee.

Thesis or Dissertation.—The Master's thesis may not be counted for more than 9 units of credit. It must be presented in its finished form to the professor under whose direction it is written at least two weeks before the close of the term in which the degree is to be granted.

The Doctor's dissertation may be counted for the equivalent of one full year of graduate study. It must be finished and submitted at least six weeks before the close of the final quarter.

Minor Subjects.—The candidate for the degree of Master of Arts in English does not present a minor in any other department.

The candidate for the degree of Doctor of Philosophy may choose either one or two minor subjects at his discretion. Under unusual circumstances, with the approval of the department and by vote of the Graduate Study Committee, the minor subject requirement may be waived.

Examinations.—The candidate for the Master's degree must pass a written examination covering the whole field of English and American Literature. This examination will be held each quarter, and should not be taken in the quarter in which the degree is granted. A second failure to pass the examination disqualifies the candidate.

The Doctor's examination is oral, and is set at some time not later than the eighth week of the last (academic) year of candidacy. For details regarding this examination the candidate should consult his major professor.

LOWER DIVISION COURSES

A. Elementary Composition.—A one-quarter course required of all first-year undergraduates who do not pass the matriculation test in English.

1 unit, autumn, *winter, and *spring quarters (Seward and Others) TThS 8; MWF 8, 9, 19, 11

Autumn 56 (3 sections); winter, 105 (5 sections); spring, 48 (3 sections)

[For each student in Course A, except those who meet the requirement within a short time, a fee of $10 is charged.]

2. English Composition.

a) Narration and Description.

b) Exposition.

3 units, any two quarters (Seward, Yost, Hays, Hinkle, McClelland, Winters, Avery, Baker, Sisson, Bailey, and Others) MWF 8, 9, 10, 11, 1:05; TThS 8, 9, 10

Autumn, 414 (16 sections); winter, 361 (15 sections); spring, 370 (15 sections); summer, 37 (2 sections)

[Upper Division students registered in any of the following Lower Division courses shall receive one unit less than the regular specified credit.]

9a. American Literature.—To the Civil War. Upper Division students are allowed only 3 units' credit. (See under 9*b*.)

4 units, autumn quarter (Hall) MTWF 11

Autumn, 25

9b. American Literature.—From the Civil War to the present. Not open, except by special permission, to students having entrance credit in American literature. Upper Division students are allowed only 2 units' credit.

3 units, winter and summer quarters (Hall) MWF 10

Winter, 43; summer, 17

10. English Masterpieces.—A study of representative works of important English writers. (*a*) Writers before 1780; (*b*) Writers from 1780 to the present. Upper Division students are allowed only 3 units' credit. Not open to those who intend to major in English.

4 units, autumn, *winter, and *spring quarters (Bailey, Seward, McClelland) (*a*) MTWF 9; (*b*) MTWTh 11

Autumn, 93 (2 sections); winter, 78; spring, 120 (2 sections)

11. Introduction to Poetry.—A study of the nature, methods, and forms of poetry, with exercises in analysis and interpretation. Open to students of all departments; if juniors and seniors, with only 3 units' credit. Courses 11 and 18 may not both be counted for credit by the same student.

4 units, winter quarter (Seward) MTWTh 11

Winter, 16

12. Introduction to Essay Reading.—Essays, chiefly recent, designed to form a stimulating approach to this type of literature. Upper Division students are allowed only 2 units' credit.
3 units, summer quarter (Russell) MWF 9
Summer, 10

13. Biography.—A study of biographies and memoirs, with written reports. Limited to Lower Division students.
3 units (Mirrielees) [Not given in 1928–29]

14. Tennyson.—A study of portions of Tennyson's poems, illustrating the growth of his literary art; designed for and open to Lower Division students only.
4 units (Hall) [Not given in 1928–29]

15. Introduction to General Literature.—Its field, problems, and methods. Upper Division students are allowed only 2 units' credit.
3 units, winter quarter (Guérard) MWF 9
Winter, 46

18. Types of Poetry.—An introduction to English narrative and lyric poetry considered in respect to content, form, and the nature of its appeal. Courses 11 and 18 may not both be counted for credit by the same student. Upper Division students are allowed only 3 units' credit.
4 units, spring quarter (Hall) MTWF 10
Spring, 8

21. Victorian Novelists.—A study of the more important Victorian novelists. Courses 21, 22, and 23 are not open to students who expect to major in English. Not more than one of them may be counted toward a degree if Course 185 is also counted.
4 units (Seward) [Not given in 1928–29]

22. Victorian Prose.—A study of the more important Victorian prose writers other than novelists. See under Course 21. Only 2 units' credit is granted to Upper Division students.
3 units (Seward) [Not given in 1928–29]

23. Nineteenth-Century Poets.—A study of the more important English poets of the period that includes Tennyson and Swinburne. See under Course 21. Only 2 units' credit is granted to Upper Division students.
3 units (Seward) [Not given in 1928–29]

24. English Bible.—Representative portions of the Old Testament studied as literature. Upper Division students are allowed only 2 units' credit.
3 units, summer quarter (Gray) MWF 11
Summer, 11

25. Shakespeare.—An introduction to Shakespeare, with rapid reading of most of the plays, in chronological sequence. Open to all students; continued in Course 159. Upper Division students are allowed only 3 units' credit.
4 units, autumn and spring quarters (Davis, Bailey) MTWTh 10
Autumn, 52; spring, 91

27. Browning.—An introductory course, open to all students. Upper Division students are allowed only 2 units' credit.
3 units, autumn quarter (Russell) MWF 10
Autumn, 32

ADVANCED COURSES

[Unless otherwise specified, the following courses are open to third-year and fourth-year students of all departments. Courses numbered between 100 and 190 may sometimes be taken by graduate students for graduate credit, provided the instructor in such a course assigns to the student in question additional work of a genuinely graduate character.]

130. Advanced Composition.—A course intermediate between the elementary and the more specialized branches of writing. Practice in various forms, with formulated criticism and illustrative reading.
4 units, autumn quarter (Russell) MTWF 9
Autumn, 26

131. Exposition.—An advanced course, intended primarily for students doing scientific and professional work. Special attention will be given to students preparing theses or other papers. Prerequisite: Course 2 or an equivalent.
3 units, autumn and spring quarters (Hall, Seward) MWF 10, TTh 10
Autumn, 29; spring, 63

132. Argumentation.—[See under Division of Public Speaking. The course is strongly commended to all English and other students.]

134. Dramatic Composition.—The principles of dramatic writing developed in connection with the student's own work. Enrollment limited; students must submit specimens of their work in advance.
3 units (Gray) [Not given in 1928–29]

135. Verse Writing and Prosody.—Practical exercises in lyric composition, with illustrative study of modern poets.
2 units (Seward) [Not given in 1928–29]

136. Short Story Writing.—A study of the short story, with practice in story writing. Open by permission to a limited number of upper-classmen.
4 units, winter and spring quarters (Mirrielees) MTWTh 9
Winter, 22; spring, 13

137. Essay Writing.—Preparation of magazine articles, criticisms, and papers of both informal and analytical character. Prerequisite: Course 2.
3 units, winter quarter (Russell) MWF 11
Winter, 23

138. Narrative Writing.—Open by permission to students who have completed Course 136.
4 units (Mirrielees) [Not given in 1928–29]

139. Directed Reading.—Eight hours of reading weekly, with informal reports and discussion. The course furnishes an opportunity for students to read books which are not assigned in connection with their other courses. Open in order of application to a limited number of upper-class students from other departments; not to English major students. May not be taken for more than two quarters. Preference in registration is given to students who have not already taken the course.
2 units, autumn, winter, and spring quarters (Seward, and Others) By arrangement
Autumn, 89 (13 groups); winter, 117 (17 groups); spring, 94 (14 groups)

154a. History of the Short Story in English.
4 units, winter quarter (Mirrielees) MTWTh 10
Winter, 32

154b. The Contemporary Short Story.—Prerequisite: Course 154*a*.
3 units, spring quarter (Mirrielees) MTW 10
Spring, 19

156. Ballads.—Lectures and reports on the origin, sources, and characteristics of the English and Scottish popular ballads. Class limited to sixteen.
3 units (Bailey) [Not given in 1928–29]

158. Chaucer.—An elementary course, including an outline of Middle English grammar.
4 units, autumn quarter (Craig) MTWF 9
Autumn, 35

159. Shakespeare.—A continuation of Course 25, devoted to a more intensive study of a few plays. Designed primarily for English major students in their third year; open to others on recommendation from Course 25.
3 units, autumn quarter (Bailey) MWF 10
4 units, spring quarter (Mirrielees) MTWTh 8
Autumn, 22; spring, 17

160. Spenser.
4 units, spring quarter (Briggs) TWThF 10
Spring, 16

161. Milton.
3 units (Briggs) [Not given in 1928–29]

162. Wordsworth.
3 units (Hall) [Not given in 1928–29]

163. Browning.—*The Ring and the Book* and a selection from the dramas and longer poems (the shorter poems being studied in Course 27).
3 units, winter quarter (Russell) MW 2–3:30
Winter, 40

164. Carlyle.—A study of his essays, histories, and other works.
4 units (Davis) [Not given in 1928–29]

165. Emerson.—A study of his essays and poems.
3 units, spring quarter (Davis) TTh 9 and a third hour by arrangement
Spring, 3

167. The Arthurian Legends.—Their origin and literary utilization from early times to the present.
3 units (Davis) [Not given in 1928–29]

168. The English Novel.—The history of English prose fiction from DeFoe to the greater novelists of the nineteenth century.
4 units, winter quarter (Briggs) TWThF 1:05
Winter, 6

169. The Contemporary Novel.—Lectures on English and American fiction, with the reading of representative novels and reports upon them. Open to third-year and fourth-year students of all departments.
4 units, summer quarter (Knowlton) MTWTh 9
Summer, 37

170. The English Drama to 1642.—The beginnings and development of the drama are specially studied.
4 units, winter quarter (Craig) TWThF 11
Winter, 9

171. Later European Drama.—A study of Ibsen and of subsequent dramatists. Open to third-year and fourth-year students of all departments.
2 units, summer quarter (Larsen) TTh 10
Summer 19

173. Contemporary Poetry.—A survey of English and American poetry since 1890, with especial attention to the poetic revival of the present time.
3 units (Gray) [Not given in 1928–29]

174. The Earlier English Essay.—A study of the essay as a type, from Bacon to the nineteenth century.
3 units, autumn quarter (Russell) MW 2–3:30
Autumn, 9

175. The Later English Essay.—A continuation of Course 174, extending from the middle of the nineteenth century to the present.
3 units, winter quarter (Russell) MWF 10
Winter, 3

181. Medieval Literature, with special reference to Middle English.—The course serves as a general introduction to medieval European literature, which is studied by types: romances, histories, lyrics, fabliaux, etc.
4 units, winter quarter (Kennedy) MTWF 10
Winter, 43

182. English Literature from 1557 to 1660, exclusive of the Drama.
4 units, spring quarter (Craig) TWThF 9
Spring, 39

183. English Literature from 1660 to 1780.
4 units, autumn quarter (Bailey) MTWF 8
Autumn, 61

184. English Literature from 1780 to 1832.
4 units, winter and summer quarters (Hall) MTWF 8
Winter, 46; summer, 30

185. English Literature from 1832 to 1900.—Not open to those who have taken two or more of the courses in Victorian literature, 21, 22, and 23.
4 units, spring quarter (Seward) MTWTh 11
Spring, 42

186. Criticism of Recent Literature.—Practical analysis and valuation; book reviews and discussions. Limited to eight seniors, admitted from any department on recommendation.
3 units, summer quarter (Russell) MW 2–3:30
Summer, 15

GRADUATE AND UNDERGRADUATE COURSES

190. American Poetry.—A study of the greater American poets with especial reference to American social conditions.
4 units, spring quarter (Hall) MTWF 11
Spring, 8

191. Essay Writing (advanced course).—An opportunity for the crystallizing and formulating of opinion on such subjects as education, government, recreation, art, and personal relationships. Open only on consultation with the instructor.
3 units (Russell) [Not given in 1928–29]

192. Old English.—Elements of Old English grammar, with reading exercises.
4 units, winter and summer quarters (Kennedy, Larsen) MTWF 9
Winter, 13; summer, 25

193. English Literature and Political Thought.
4 units, summer quarter (Briggs) TWThF 1:05
Summer, 26

194. History of English Criticism.—A study of critical theory from the Renascence to the early eighteenth century.
3 units, summer quarter (Briggs) TThF 10
Summer, 21

196a. Problems and Methods of General Literature: Literature and Civilization.—In this and in Courses 196*b* and 196*c* a reading knowledge of one or more modern Continental languages is desirable, but not indispensable.
3 units, winter quarter (Guérard) MWF 8
Winter, 31

196b. Problems and Methods of General Literature: Types of Criticism.—[See under Course 196*a*.]
3 units, spring quarter (Guérard) MWF 8
Spring, 17

196c. Problems and Methods of General Literature: The Doctrine of Art for Art's Sake.—[See under Course 196*a*.]
3 units, summer quarter (GUÉRARD) MWF 8
Summer, 16

197. The Utopian Theme in Literature.—A study of the Utopian idea and related social and political conceptions, as expressed in literature.
3 units, summer quarter (RUSSELL) MWF 10
Summer, 22

198. The Modern English Language.—A study of usage in pronunciation, grammar, etc., in the light of the history of the language.
3 units, spring quarter (KENNEDY) MWF 9
Spring, 23

199. Verse Forms.—A study of metrics and verse forms in their relation to content.
2 units, winter and summer quarters (SEWARD, GRAY) TTh 1:05, 11
Winter, 13; summer, 21

200. The English Teacher's Equipment.—A constructive study of the problems that face the English teacher in the high school; designed as an introduction to the Teachers' Course in the subject.
(*a*) Composition. 2 units, autumn quarter (SEWARD) TTh 1:05
(*b*) Literature. 2 units, spring quarter (SEWARD) TTh 1:05
(*c*) Oral Reading. 2 units, winter quarter (BUCKINGHAM) M 2:05–4:05
Autumn, 19; winter, 15; spring, 17

GRADUATE COURSES

201. Bibliography and Methods.—An introduction to the materials and methods of advanced study in English. Recommended for all candidates for higher degrees.
3 units (KENNEDY) [Not given in 1928–29]

202. Satire.—A study of the satiric element in literature, exemplified by some particular phase selected for specialization.
4 units (RUSSELL) [Not given in 1928–29]

203. Tragedy.—A comparative study of the theory and practice of tragedy in various literatures.
4 units (GRAY) [Not given in 1928–29]

204. Comedy.—An inquiry into the nature of the comic and into its literary uses, as exemplified especially in the drama.
4 units (2 autumn, 2 winter) (SEWARD) Th 9-11
Autumn, 5; winter, 5

206. The Napoleonic Legend in European and American Literature.—Prerequisites are a course (in school or college) in modern European history, and a reading knowledge of at least one modern Continental language.
3 units (GUÉRARD) [Not given in 1928–29]

207. The Spirit of 1848 in Europe.—Culmination and frustration of the Romantic ideal; the new scientific-industrial era. Prerequisites as for Course 206.
3 units, spring quarter (GUÉRARD) M 1:05–3
Spring, 5

208. The Historical Spirit in Literature.—Its growth from 1700 to the present day. Prerequisites as for Course 206.
3 units, summer quarter (GUÉRARD) M 1:05–3
Summer, 6

210. Chaucer (advanced course).—*The Canterbury Tales*, or the *Troilus*, will be studied, with attention to the structure and history of the work and its literary significance.
3 units (KENNEDY) [Not given in 1928–29]

211. Shakespeare.—An introduction to the bibliography of the subject, the history of the text, and methods of critical study; with a critical study of one or more plays.
4 units, autumn and summer quarters (CRAIG, GRAY) TTh 2–4
Autumn, 15; summer, 26

212. Problems of Victorian Literature.—A study of selected topics involving the literary backgrounds of the period.
4 units (2 autumn, 2 winter) (SEWARD) [Not given in 1928–29]

214. Spenser.
4 units, summer quarter (KNOWLTON) MW 2–4
Summer, 14

215. Elizabethan Drama Seminary.
4 units
a) Webster and Ford, one quarter (GRAY) [Not given in 1928–29]
b) Marlowe, autumn quarter (BRIGGS) TWThF 1:05
Autumn, 11

216. The Life and Thought of the Sixteenth Century.
4 units, autumn and winter quarters (BRIGGS) TTh 7:30–9 P.M.
Autumn, 9; winter, 8

217. Eighteenth Century.—The romantic age, its antecedents and consequences.
4 units, winter and spring quarters (BAILEY) MW 1:30–3
Winter, 5; spring, 10

218. Early English Seminary.
3 units (KENNEDY) [Not given in 1928–29]

220. American Colonial Literature.—A research course. Prerequisites: American history and English literature of the eighteenth century.
4 units, summer quarter (HALL) TTh 2–4
Summer, 4

221. Literary Problems of the English Renaissance.
4 units, winter and spring quarters (CRAIG) TTh 2–4
Winter, 10; spring, 12

222. Bacon.
4 units, spring quarter (BRIGGS) TTh 7:30–9 P.M.
Spring, 11

225. History of the English Language.—A study of the earlier history of the language, and an introduction to Germanic philology. A knowledge of Old English is required.
4 units, spring quarter (KENNEDY) MTWF 11
Spring, 4

227. Middle English Readings.—Elements of grammar, and interpretation of selections from the literature.
3 units, winter and *summer quarters (KENNEDY, LARSEN) WF 3:30–5
Winter, 3; summer, 1

228. Beowulf. Course 192 or an equivalent is a prerequisite for this course.
3 units, summer quarter (LARSEN) MW 2–3:30
Summer, 3

235. Research Course.—In this course, the student pursues a special subject of investigation under the supervision of some member of the department. Thesis work is not to be registered under this course.
Any quarter (DEPARTMENTAL FACULTY) By arrangement
Autumn, 3; winter, 3; summer, 6

[Teachers' Course in English.—See Education 208.]

The English Review Club meets for the discussion of recent publications of interest to students of English on the second Monday of each month from 7:30 to 9 P.M. All English graduate students, members of the depart-

mental faculty, and undergraduates doing advanced work are invited to attend the meetings.

DIVISION OF PUBLIC SPEAKING

Lee Emerson Bassett, Professor
James Gordon Emerson, Associate Professor
Gordon Arthur Davis, Associate Professor and Director of Dramatics
Elisabeth Lee Buckingham, Assistant Professor
Harold Helvenston, Instructor
Robert M. C. Littler, Acting Instructor
Justus Wheeler Barger, Kenneth Raymond McDougall, Fred Ames Weller, Shirley Williamson, Assistants in Instruction

The Division of Public Speaking offers such courses, together with personal conferences, as may help the student to gain self-control and self-reliance, to realize and use his latent resources and powers, and contribute to his usefulness as a citizen.

The courses in the Division offer instruction in the theory of argumentation and speech-making, and practice in the organization and presentation of speeches and arguments; bring the student in direct and vital contact with the thought and spirit of the best literature through the vocal rendering of it; give practical drill in the use of the voice, in phonetics and diction; provide training in stage technique and dramatics; and prepare candidates to teach the various branches of Public Speaking.

Graduation.—The requirements for the degree of Bachelor of Arts in English-Public Speaking are the satisfactory completion of about thirty units in Public Speaking and, in addition, the following courses in English: Shakespeare (25), History of English Literature (183, 184), and three courses selected from the following list: 14, 21–23, 27 (or 163), 158–62, 168, 169, 170, 171, 174, 181, 182, 185, 198. Lower Division students are advised to complete, if possible, during their first year Courses 4 and 5 in Public Speaking; and during their second year Courses 7 and 119 *a* (or 119 *b*). Candidates for the degree are required to have the same reading knowledge of at least one foreign language as English major students.

[Note.—*Courses in Public Speaking are, with a few exceptions, open to but a limited number of students.* Lower Division students should obtain seat cards from the office of the Lower Division; Upper Division students should apply at the Division of Public Speaking on registration day. The instructor reserves the right to refuse to enroll students who do not appear at the first meeting of the class.]

Lower Division Courses

4. Principles of Vocal Expression.—A general course in vocal training, the use of the speaking voice, the vocal interpretation of masterpieces in prose and poetry, and practice in the preparation and delivery of short speeches. Class recitations and personal conferences. Sections limited to twenty students.

3 units, autumn, *winter, and *spring quarters
autumn (Bassett) MWF 9; (Buckingham) MWF 10; (McDougall) TThS 9
winter (Buckingham) MWF 10; (McDougall) TThS 9
spring (Bassett) MWF 9; (McDougall) MWF 8
3 or 5 units, summer quarter (Buckingham) MTWThF 11; (McDougall) MTWThF 8
Autumn, 62 (3 sections); winter, 37 (2 sections); spring, 41 (2 sections); summer, 54 (2 sections)

5. Reading Aloud.—The oral rendering of various forms of literature. Particular attention is given to rhythm, time, melody, quality, and other musical elements of verse. Assignments for general class practice and for individual study and rendition. Prerequisite: Course 4 or its equivalent. Sections limited to twenty students.

3 units, autumn and *winter quarters
autumn (BUCKINGHAM) MWF 11
winter (BUCKINGHAM) MWF 11
spring (BASSETT) MWF 10
Autumn, 16; winter, 18; spring, 22

6. Practical Phonetics.—A course in the enunciation and pronunciation of the English language. Designed especially for foreign students.

1 unit, winter and spring quarters (BASSETT) T 1:05
Winter, 7; spring, 10

7. Extemporaneous Speaking.—Practice in extemporaneous speaking on subjects of the student's choice, with attention to the preparation of speech outlines. Not open to first-year students. With the exception of the sections reserved for engineers this course should be preceded by Course 4. Sections limited to eighteen students.

3 units, autumn, *winter, and *spring quarters
autumn (EMERSON) MWF 10; (LITTLER) MWF 9, TThS 9; (WELLER) MWF 8
winter (EMERSON) MWF 10; (LITTLER) MWF 11, TThS 11; (WELLER) MWF 8; (BARGER) MWF 9
spring (EMERSON) MWF 9; (LITTLER) TThS 8, 9
3 or 5 units, summer quarter (EMERSON) MTWThF 9
Autumn, 70 (4 sections); winter, 67 (5 sections); spring, 68 (4 sections); summer, 29

8. Public Speaking.—A continuation of Course 7 with particular reference to elements of attention. Limited to eighteen students.

3 units, autumn and *winter quarters
autumn (BASSETT) MWF 10; winter (EMERSON) MWF 9
Autumn, 18; winter, 17

UPPER DIVISION COURSES

116. Public Speaking (advanced).—A study of models of speech composition and the preparation of original speeches, with special attention to the style of spoken discourse. Prerequisites: Courses 7 and 8.

3 units, winter quarter (BASSETT) MWF 10
Winter, 8

118. Reading and Staging Plays.—A course in play-reading and play-giving with special reference to high-school and amateur dramatics.

3 units [Not given in 1928–29]

119a. Vocal Interpretation.—The oral interpretation of literature, both prose and poetry. Prerequisites: Courses 4 and 5. Limited to twenty students.

2 units, winter quarter (BASSETT) T 2:05–4
Winter, 8

119b. Vocal Interpretation: Dramatic Literature.—The preparation of short plays of literary and dramatic merit for presentation before the class. Parts are assigned. Attention is given to characterization and action. Prerequisites: Courses 4 and 5. Limited to twenty students.

[Not given in 1928–29]

121. Theatrical Workshop.—Practical instruction in stage technique and stage management with particular attention to the construction and designing of stage scenery, and to costuming, lighting, acting, and stage direction.
4 units, autumn, *winter, and *spring quarters (Helvenston) TTh 1:05–3:05
3 or 5 units, summer quarter (Helvenston, Williamson) T 1:05–3:05; Th 1:05–4:05
Autumn, 28; winter, 8; spring, 13; summer, 58

122. Theatrical Workshop: (Advanced).—A continuation of Course 121, with assignments based on the needs of individual students.
4 units, autumn and *summer quarters (Helvenston) TTh 1:05–3:05
Autumn, 7; summer, 5

123. History of the Theater.—A historical survey of the origin and development of the theater; its social function and significance, and a study of various kinds of theaters.
2 units, summer quarter (Buckingham) [Not given in 1928–29]

124. Problems of Stage Presentation.—A consideration of methods of presentation of certain Greek and Elizabethan plays in their own and successive periods. Limited to 15 students.
2 units [Not given in 1928–29]

125. Scenic Design.—A study of stage production from the designer's point of view with particular emphasis on the conception and execution of scenery for the various forms of the drama. Individual problems in designing settings for plays and practical work on productions in the University Theater.
3 units, winter and *spring quarters (Helvenston) M 1:05–2:05, TTh 3:05–4:05
3 units, *summer quarter (Helvenston) M 1:05–3:05, T 3:05–4:05
Winter, 16; spring, 18; summer, 8

132. Argumentation.—The theory of argumentation, with practice in the preparation of briefs and in the writing of arguments, together with a critical analysis of argumentative masterpieces. Open to all students who have made a satisfactory grade in English 2.
3 units, autumn and *summer quarters (Emerson) MWF 9, 10
Autumn, 11; summer, 8

133. Public Discussion.—Individual and group discussion of topics of current public interest. Open to juniors and seniors who have completed Courses 7, 8, and 116.
3 units, spring quarter (Emerson) MWF 10
Spring, 11

149. Voice Training.—Lectures on the voice, with class exercises. Limited to majors and minors in Public Speaking.
2 units, autumn quarter (Bassett, Buckingham) MWF 2:05–3:05
Autumn, 16

151. Reading Aloud (advanced).—A course in the preparation of poems, stories, and scenes from novels and plays suitable for public presentation. Prerequisites: Courses 4, 5, and 119*a*.
2 units, spring quarter [Not given in 1928–29]

152. Practical Debate.—Under supervision of the department those students who work on intercollegiate debate questions may receive credit upon satisfactory completion of the work.
1 or 2 units, any quarter except summer (Emerson, Barger) By arrangement
Autumn, 20; winter, 15; spring, 10

153. Oral Debate.—Practice in the preparation and delivery of oral arguments, chiefly on current public questions. This course is designed particularly for students not on University debating squads but who desire individual and group training in debating.

2 units [Not given in 1928–29]

160. Acting: Theory and Performance.—The principles of dramatic interpretation and characterization. Problems of make-up. Study of the technique of acting by actual performance of plays in the Little Theatre.

3 units, autumn, winter, spring, and summer quarters (Davis) M 3:05–4:05, W 2:05–4:05

Autumn, 14; winter, 20; spring, 20; summer, 18

161. Stage Direction.—Emphasis upon direction of school dramatics. Aims and methods of organization. Fundamental principles of direction: casting, rehearsal technique, performance. Students will have actual direction of plays produced by class in Acting (Course 160).

3 units, autumn, winter, spring, and summer quarters (Davis) M 2:05–3:05, W 2:05–4:05

Autumn, 8; winter, 8; spring, 7; summer 6

200c. Teachers' Equipment in Oral Reading.—A study of the principles of expressive speech and training in reading aloud, with assignments adapted to the needs of individual members of the class.

2 units, winter quarter (Buckingham) M 2:05–4:05
2 or 3 units, summer quarter (Buckingham) MWF 10

Winter, 15; summer, 20

Graduate Courses

201. Experiments in Voice Production.—Tests of vocalization and audition will be made with the aid of an Edison recording machine. The work aims at individual improvement in speech. Enrollment is limited to teachers of and major students in English and Public Speaking.

1 unit, autumn quarter (Buckingham) M 3:05–4:05

Autumn, 6

202. The Reading of Verse.—A study of metrics, rhythms, and verse forms with particular reference to the oral reading of verse.

2 units, autumn quarter (Bassett) T 2:05–4:05

Autumn, 9

203. Advanced Phonetics.—The sounds of English with reference to standards of pronunciation. Attention will be given to the improvement of speech of individuals and to methods and exercises for the correction of minor speech defects.

2 units, winter quarter (Bassett) M 2:05–4:05

Winter, 5

204. Reading Tests.—Survey of the psychological tests of reading ability with practice in the use of the scales and tests of Gray, Monroe, Thorndike, and others. Primarily for teachers.

1 unit [Not given in 1928–29]

205. Problems of Proof, Seminar.—Papers and reports on such topics as the argumentative method and the scientific method; the scientific method in its relation to special fields, e.g., government and politics; modern fact-finding methods and technique; classical controversies.

2 units, spring quarter (Emerson) By arrangement

Spring, 1

206. Organization of Speech Material.—A study of the structure of certain notable speeches, e.g., those of Burke, Webster, Phillips, Lincoln, and discussion of methods of organizing material for effective presentation.

2 units [Not given in 1928–29]

207. School Repertory of Literary Drama.—Study and working out of seldom performed plays of the best dramatists from Aeschylus to Ibsen, for production by students in high schools and colleges.
1 unit, winter quarter (Buckingham) W 2:05–3:05
2 units, summer quarter By arrangement
Winter, 3; summer, 7

[Teachers' Course in Oral Expression.—See Education 217.]

GERMANIC LANGUAGES

James Owen Griffin, Professor Emeritus
Bruno Boezinger, Associate Professor Emeritus

William Alpha Cooper, Karl Gustav Rendtorff, Professors
Friedrich von der Leyen (University of Köln, Germany), Acting Professor (Summer Quarter)
August Carl Mahr, Assistant Professor
Clara Eberhard, Helena May Nye, Instructors
Louise Gode, Acting Instructor (Summer Quarter)
Herman Salinger, Assistant in Instruction

The elementary and intermediate courses listed below are designed to prepare students to read German without translation, and to express ideas in simple German prose. Those who have completed Courses 101, 102, and 103 may take any more advanced course for which, in the judgment of the instructor in charge, they are prepared. Courses 191, 192, 193, 194, and 195 are given entirely in English; the other advanced courses presuppose considerable facility in reading German, and most of them are conducted in German. Courses not assigned to any particular quarter, and with "by arrangement" instead of definite hours in the time schedule, will be given whenever there is sufficient demand for them.

The department accepts candidates for the degrees of Bachelor of Arts, Master of Arts, and Doctor of Philosophy, and for certification as high-school teachers. Special consideration is given to the needs of those who intend to make the teaching of German their profession.

Graduation.—Candidates for the degree of Bachelor of Arts in Germanic Languages are expected to take thirty units beyond second-year German, i.e., from courses numbered 101, 102, 103, 111, and higher. Courses 1, 2, 3, 21, 22, 23, or the equivalents, should be completed before admission to the Upper Division in order to satisfy these requirements within two years.

Teacher's Recommendation.—Candidates for the Teacher's Recommendation in German as a major subject are expected to take second-year German (fifteen units) and the following: fifteen units elected from Courses 101–105, 111, and 151; two units from Courses 161–164, 231; fifteen units from Courses 174–178, 181–188, 200, 224; and two units from Courses 191–192. Proficiency in German will be insisted upon.

Candidates for the Teacher's Recommendation in German as a minor subject are expected to take, in addition to second-year German (fifteen units), fifteen units elected from Courses 101–105, 111, 151, 161–164, 174–178, and 181–188. Proficiency in German will be insisted upon.

Advanced Degrees.—Candidates for the degree of Master of Arts in Germanic Languages are expected to take fifteen units, including Course 251, in addition to the requirements for the degree of Bachelor of Arts.

Candidates for the degree of Doctor of Philosophy will need to devote at least three years to graduate study. The library facilities are sufficient, and the collection is being strengthened in all directions. The private library of the late Professor Hildebrand of Leipzig furnishes valuable material, particularly in the older literature and in lexicography. Good opportunities are offered also for advanced work in modern literature, the Goethe collection being especially satisfactory. The files and the current numbers of the most important journals are at hand.

Library.—The department maintains, in Room 112, a special library of its own, including a collection of German textbooks and a model reference library for a secondary-school teacher. This collection of books is supplemented by an extensive collection of maps, wall pictures, and lantern slides, suited for use in teaching.

Fees.—For Courses 1, 2, and 3, First-Year German, a special university fee of $7.50 per quarter is charged.

COURSES OF INSTRUCTION

1. First-Year German.—It is the object of this course to put the learner in possession of the elements of the German language. This implies: (1) a personal command of simple German, that is, the ability to understand such German, whether heard or read, and to employ the language in simple conversation, narration, and description, both orally and in writing; (2) such a ready familiarity with the elements of German grammar as is essential for the attainment of this command of the language.

5 units, autumn and *winter quarters (Eberhard, Nye, Salinger) (autumn) MTWThF 8, 9, 11; (winter) MTWThF 9

Autumn, 132 (4 sections); winter, 32

2. First-Year German.—A continuation of Course 1.

5 units, winter and *spring quarters (Eberhard, Nye, Salinger) (winter) MTWThF 8, 9, 11; (spring) MTWThF 9

Winter, 116 (4 sections); spring, 32

3. First-Year German.—Beside being a continuation of Course 2, this course affords, in the autumn quarter, an opportunity for students with more than one and less than two years of high-school German to prepare themselves to take up second-year college German (Course 21) in the winter quarter.

5 units, spring and *autumn quarters (Eberhard, Nye, Salinger) (spring) MTWThF 8, 9, 11; (autumn) MTWThF 9

Autumn, 28; spring, 97 (4 sections)

[Note.—Courses 1, 2, and 3, together, are equivalent to two years of German in the high school, and may be taken by students who have presented no units of credit in German for entrance to the University. Those who present one unit for entrance may take Courses 2 and 3.]

1a. Elementary German.—Special course for beginners, having particularly in mind requirements of certain other departments, and the University requirement for the Ph.D. degree.

5 units, summer quarter (Gode) MTWThF 11

Summer, 33

15. German Pronunciation.—Practice in reading aloud and declaiming. Prerequisites: Courses 1 and 2. This course may be taken three quarters for credit.

1 unit, autumn, winter, and spring quarters (Salinger) T 1:05

Autumn, 11; winter, 8; spring, 8

15. Oral German.—Practice in conversation on assigned topics, and recitation of memorized passages of verse and prose. Prerequisite: two years of high-school German, or the equivalent.
2 units, summer quarter (Gode) TTh 8
Summer, 10

20. Free Reading.—Open to students who have had a year or more of German. Permission of the instructor necessary before registration. Thirty-six hours of reading per unit, and weekly conferences with the instructor.
1 or 2 units, each quarter (Eberhard, Nye) By arrangement
Autumn, 65; winter, 71; spring, 77

21. Second-Year German.—The aim of this course is to extend and strengthen the student's personal command of German, both oral and written. The course is taken to best advantage as a whole, but may be taken in part, either the division 21*a*, which is devoted to the reading and discussion in German of texts selected from the writings of contemporary or late nineteenth-century authors, or the division 21*b*, which affords training in composition, conversation, and practical grammar.

21a. Second-Year Reading.
3 units, autumn and *winter quarters (Eberhard, Mahr, Nye, Salinger)
(autumn) MWF 8, 10, 11; (winter) MWF 11
Autumn, 97 (3 sections); winter, 27

21b. Second-Year Composition.
2 units, autumn and *winter quarters (Cooper, Mahr)
(autumn) TTh 8; (winter) TTh 11
Autumn, 18; winter, 12

22. Second-Year German.—A continuation of Course 21.

22a. Second-Year Reading.
3 units, winter and *spring quarters (Eberhard, Mahr, Nye, Salinger)
(winter) MWF 8, 10, 11; (spring) MWF 11
Winter, 58 (3 sections); spring, 10

22b. Second-Year Composition.
2 units, winter and *spring quarters (Cooper, Mahr)
(winter) TTh 8; (spring) TTh 11
Winter, 9; spring, 6

23. Second-Year German.—A continuation of Course 22.

23a. Second-Year Reading.
3 units, spring and *autumn quarters (Eberhard, Mahr, Nye, Salinger)
(spring) MWF 10, 11; (autumn) MWF 11
Autumn, 7; spring, 36 (2 sections)

23b. Second-Year Composition.
2 units, autumn and *spring quarters (Cooper) (autumn) TTh 11; (spring) TTh 8
Autumn, 2; spring, 5

[Note.—Second-year German (which includes Courses 21, 22, and 23) is the equivalent of the third and fourth years of German in the high school. Students who present three units in German for entrance may take Courses 22 and 23, or 23 and 24.]

24. Second-Year Reading.—Prerequisite: two years of high-school German, or the equivalent. Reading and discussion in German of texts selected from the writings of contemporary or late nineteenth-century authors.
3 units, summer quarter (Gode) MWF 8
Summer, 22

25. Science German.—Prerequisites: Courses 21*a* and 22*a*. Assignments of readings in the individual student's major subject, and weekly reports to the instructor. Thirty-six hours of reading per unit. Permission of instructor necessary before registration.
1 or 2 units, winter and *summer quarters (Mahr) By arrangement
Winter, 4; summer, 8

26. Second-Year Translation.—Prerequisite: two years of high-school German, or the equivalent. One unit science, one unit literary German.
1 or 2 units, summer quarter (Mahr) (science) M 11, (literary) W 11
Summer, 9

29. German Composition.—Prerequisite: two years of high-school German, or the equivalent.
2 units, summer quarter (Gode) TTh 9
Summer, 4

31. Translation of German.—Analysis of the processes involved in translation, and practice in translating. Prerequisites: Courses 21*a* and 22*a*.
2 units, winter quarter (Cooper) TTh 10
Winter, 17

32. Translation.—A continuation of Course 31.
2 units, spring quarter (Cooper) TTh 10
Spring, 24

101. Novels.—A course in rapid reading of modern novels, with discussions in German of their subject matter and technique.
3 units, autumn quarter (Cooper) MWF 9
Autumn, 10

102. Dramas.—A continuation of Course 101.
3 units, winter quarter (Cooper) MWF 9
Winter, 13

103. Masterpieces.—A continuation of Course 102.
3 units, spring quarter (Cooper) MWF 9
Spring, 10

104. German Short Stories.—Prerequisite: second-year German, or from three to four years of high-school German.
3 units, summer quarter (Mahr) MWF 9
Summer, 7

105. German Lyrics.
3 units, winter and summer quarters (Mahr) [Not given in 1928–29]

111. Advanced Composition.—By composition is meant, not translation from English, but the employment in connected prose of German material either gathered from reading or specially assigned by the instructor.
1 or 2 units, autumn and winter quarters (Mahr) By arrangement
Autumn, 1; winter, 2

112. Advanced Composition.
2 units, summer quarter (Gode) TTh 2:05
Summer, 3

120. Deutschland in Bildern.—Lectures in German, with stereopticon. Examinations in English, on subject matter. This course may be taken for credit three quarters.
1 unit, autumn and winter quarters (Mahr) TTh 10
Autumn, 22; winter, 13

121. Die deutsche Stadt.—Genesis and morphology of the city as a social and economic organism. Lectures in German, with lantern slides. One unit of credit for regular attendance. No examination.
1 unit, summer quarter (Mahr) TTh 11
Summer, 9

150. Directed Reading.—Prerequisites: Second-Year German for three quarters, and, if possible, one or more of the Courses 101 to 104. Individual courses of reading, suited to special needs and desires. Thirty-six hours of reading per unit, and brief interviews, once a week, with the instructor.
1 or 2 units, each quarter (Cooper, Mahr, Rendtorff) By arrangement
Autumn, 8; winter, 9; spring, 11; summer, 10

151. Individual Composition.—The aim of this course is to develop correct, idiomatic, and adequate expression.
1 unit, autumn and winter quarters (MAHR) By arrangement
Autumn, 2; winter, 1

152. Individual Work.—Training in other lines than reading or composition, to meet special needs.
1 unit each quarter (COOPER, MAHR, RENDTORFF) By arrangement
Autumn, 1; winter, 2; spring, 5; summer, 4

161. German Syntax.
2 units, autumn quarter (MAHR) MW 9
Autumn, 2

163. Word Studies.—Study of selected words in their relation to cultural history.
2 units, winter and spring quarters (COOPER) [Not given in 1928–29]

164. Introduction to Germanic Philology.
2 units, winter quarter (COOPER) M 2:05–4:05
Winter, 5

170. The German Historical Drama.—Study of a number of the leading historical dramas of the nineteenth and twentieth centuries.
2 units, summer quarter (MAHR) TTh 9
Summer, 8

174. Goethe's Lyrics.—A study of Goethe's lyrics in relation to his life and to his conception of the poet's calling.
3 units, autumn quarter (COOPER) MWF 11
Autumn, 5

175. Goethe's *Faust*.—Interpretation of both parts. Course conducted in German.
3 units (COOPER) [Not given in 1928–29]

177a. Schiller's Dramas.
2 units, autumn quarter (RENDTORFF) TTh 10
Autumn, 5

177b. Schiller's Poems.
2 units, winter quarter (RENDTORFF) TTh 10
Winter, 5

178. Heine's Works.
2 units, spring quarter (RENDTORFF) TTh 10
Spring, 8

181. History of German Literature up to the Nineteenth Century.
3 units (RENDTORFF) [Not given in 1928-29]

182. History of the Nineteenth-Century Literature.—Course given in English.
3 units, winter quarter (RENDTORFF) MWF 10
Winter, 3

183. Current Literary Movements.
3 units, summer quarter (MAHR) [Not given in 1928–29]

188. Main Currents of German Literature.
3 units (RENDTORFF) [Not given in 1928–29]

191. History of Germany.—A general survey, with particular emphasis on the period since 1848.
3 units, autumn quarter (RENDTORFF) MWF 8
Autumn, 13

192. History of German Civilization.—Lectures, with stereopticon.
2 units (RENDTORFF) [Not given in 1928–29]

193. General Survey of German Literature.—Lectures in English, readings from English translations.
3 units, autumn quarter (RENDTORFF) MWF 10
Autumn, 15

194. German Epics.—Lectures in English, readings from English translations.
3 units, spring quarter (RENDTORFF) MWF 10
Spring, 16

195. The German Folk Song.—Principal types studied with regard to the historical development of their meters, words, and melodies, from the Middle Ages down to the present day. Lectures in English, illustrated with vocal and instrumental renderings. Some knowledge of German and musical theory desirable, though not prerequisite.
2 units (MAHR) [Not given in 1928–29]

200. German Teacher's Course.—Subject matter, methods, books, illustrative material.
2 units (COOPER) [Not given in 1928–29]

201. Deutsche Uebungen für Lehrer.—Practical exercises in the teaching of modern German literature, and discussion of other important phases of proper preparation for teaching advanced courses. Wishes of students registered for the course will be taken into consideration in the selection of topics.
2 units, summer quarter (VON DER LEYEN) TTh 8
Summer, 10

210. Märchen und Sage.—Lectures in German.
2 units, summer quarter (VON DER LEYEN) TTh 10
Summer, 11

220. Recent German Literature and World Literature.—Lectures, for the most part in English.
3 units, summer quarter (VON DER LEYEN) MWF 10
Summer, 12

221. Gothic.
2 units, autumn quarter (MAHR) By arrangement
Autumn, 6

223. Old High German.
2 units (MAHR) [Not given in 1928–29]

224. Middle High German.—Grammar and selected texts.
2 units, winter and spring quarters (RENDTORFF) By arrangement
Winter, 3; spring, 3

225. Minnesang.
2 units, summer quarter (MAHR) By arrangement
Summer, 2

231. Comparative Grammar of German and English.
3 units, winter quarter (MAHR) By arrangement
Winter, 2

241. Seminary.
3 units, spring quarter (COOPER) W 2:05–4:05
Spring, 5

251. Master's Thesis.—The candidate reports weekly to the instructor in charge for criticism, the work extending over three quarters, as a rule.
1 to 3 units, each quarter (COOPER, MAHR, RENDTORFF) By arrangement
Winter, 1; summer, 1

ROMANIC LANGUAGES

Oliver Martin Johnston, Clifford Gilmore Allen, Alfred Coester, Aurelio Macedonio Espinosa, Professors
Frederic Anderson, Stanley Astredo Smith, Associate Professors
William Leonard Schwartz, Assistant Professor
Aurelio Macedonio Espinosa, Jr., Ida Stauf, Instructors
Marcel Françon (Harvard University), Acting Instructor (Summer Quarter)
Dámaso Alonso (Centro de Estudios Históricos de Madrid), Lecturer in Spanish Literature (Summer Quarter)
Wallace Woodward Barker, Julia Broquet, Lucile Burk, Stuart Cuthbertson, Joseph D. H. Donnay, Elisa Pérez, Suzanne Requet, Sheldon Kessinger Wirt, Assistants in Instruction

The undergraduate courses in the Romanic Languages are planned so as to give students an intimate acquaintance with the modern forms of the languages spoken in the principal Neo-Latin countries. To this end systematic attention is paid to pronunciation, reading, syntax, and conversation. In the higher courses special emphasis is laid on the study of literature. In order to give students an opportunity to become familiar with the spoken idioms, the majority of the courses are conducted in the language which forms the object of study.

REGISTRATION

First-year French and Spanish are given by competent instructors under the supervision of the department faculty, and a fee of $8 per quarter is charged. Students may receive full University credit for the following courses, as indicated: Course A2 (or B2) for students entering with *one* entrance unit in French or Spanish; Course A21 (or B21) or Course A3*a* (or B3*a*) for students with *two* entrance units; Course A22 (or B22) for students with *three* entrance units; Course A111 (or B101 or B111) for students with *four* entrance units. Students repeating work covered in the high school will receive only half-credit in the University for the courses listed above.

Students who are required to take Course A3*a* or B3*a* during the autumn quarter may begin Second-Year French or Spanish (A21 or B21) in the winter quarter. Students who complete A22 or B22 with a grade of A will be admitted to advanced courses in French or Spanish.

GRADUATION

The following work should be completed prior to admission to the Upper Division in order that the department requirements for the degree of Bachelor of Arts may be completed within two years: A1, A2, A3, or B1, B2, B3, and A21, A22, A23, or B21, B22, B23, or the equivalents. (Courses A1, A2, A3, and B1, B2, B3 are equivalent to the first two years of high-school work in French and Spanish, respectively. Courses A21, A22, A23, and B21, B22, B23 are equivalent to the third and fourth years of high-school work in French and Spanish, respectively.)

Either French or Spanish may be selected as a major subject. In addition to the elementary course, which does not count as a part of the require-

ment, majors in French or Spanish must complete the following courses for the degree of Bachelor of Arts:

1. Second-year course (15 units);
2. Advanced Composition and Conversation (9 units);
3. Six courses in literature or philology in the major subject (2-unit courses counting as half courses).

These six courses must include an outline course in the literature of the major subject (A140 for French majors and B140 for Spanish majors, or their equivalent). It is desirable that the outline course precede the other literary courses in the subject.

Major students must register each quarter for at least one course in the major subject. This provision is intended to prevent students from crowding major requirements into certain quarters and from registering as French or Spanish majors in other quarters without taking any work in the major subject.

The total number of units required for the degree of Bachelor of Arts will be approximately 43 or 44 units, exclusive of the elementary course.

THE TEACHER'S RECOMMENDATION

The department also accepts candidates for certification as high-school teachers of French and Spanish in California and provides courses to meet the special needs of such candidates. The requirements for the Teacher's Recommendation are the same as for the degree of Bachelor of Arts with the exception of the fact that the following courses must be included: A110 and A190 for majors in French; B110 and B200 for majors in Spanish.

REQUIREMENTS FOR ADVANCED DEGREES

Master of Arts

Candidates for the Master's degree in the department of Romanic Languages must present a thesis prepared under the direction of a member of the department. They must also pass a written examination, drawn up and passed upon by a committee of the department, consisting of two parts; (1) on the history of French or Spanish literature, 3 hours; (2) on the geography and history of France or Spain, to be written in French or Spanish, 2 hours.

In general, a knowledge of Latin and German is a necessary preparation for the graduate courses offered.

Doctor of Philosophy

A. For all Candidates

1. Acquaintance with the principal works on Romance philology and literature; the noteworthy histories of French or Spanish literature; editions of great writers, etc.

2. The essentials of Romance philology; Vulgar Latin; characteristics of the principal Romance languages; history of the French or Spanish language; Romance versification.

3. History of French or Spanish literature, and of the principal literary movements common to all European literatures.

4. A general knowledge of the history and geography of France or Spain.

5. A thorough knowledge of the French or Spanish language and a reading knowledge of Latin, Italian, and German.

B. For Candidates Specializing in Philology

A written examination on phonetics and general linguistics as illustrated in the history of the French or Spanish language, and on the origins of Romance literature.

C. For Candidates Specializing in Literature

A written examination on the general history of French or Spanish literature, and a detailed examination on certain literary periods and authors.

The requirements outlined above may be fulfilled by following closely the program of studies outlined below, which represents in general the detailed departmental requirements.

1. With French or Spanish as a Major.—(*a*) The completion of about thirty quarter courses of strictly graduate character or their equivalent above the Bachelor's degree. .

b) At least fifteen of these courses, or about one-half of the entire program of courses presented for the degree, should be done in French or Spanish.

c) At least five courses or their equivalent must be taken in the field of general Romance philology and literature, but two of these courses, Phonetics and Vulgar Latin, are required.

d) The ten remaining courses or their equivalent may be taken in one or two related fields or departments. For the present candidates majoring in French or Spanish are advised to select their minor or minors in Spanish, Latin, Italian, English, German, or French, Latin, Italian, English, German, respectively.

e) The dissertation required by the department as well as by the general University regulations in partial fulfillment of the requirements for the degree of Doctor of Philosophy is not included in any of the above requirements and is not to be counted as a course or courses.

II. With French or Spanish as a Minor.—The completion of about ten courses or their equivalent in French or Spanish philology and literature.

A. FRENCH

I. Elementary and Intermediate Courses

A1. Elementary French.—Training in pronunciation by means of phonetic symbols. Oral work. The elements of French grammar; the regular verb and the verbs *avoir* and *être;* Johnston and Elmore, *A French Grammar for High Schools and Colleges,* 23 lessons. Reading from Pumpelly, *A French Reader for Beginners, Elementary French Reader.*

5 units, autumn and *winter quarters

autumn (Stauf, Wirt, Requet) MTWThF 8, 9, 11; winter (Barker) MTWThF 9

Autumn, 98 (4 sections); winter, 23

A2. Elementary French (continued).—Oral work continued. Study of the irregular verbs. Johnston and Elmore, *A French Grammar for High Schools and Colleges,* 23 lessons. Reading from Pumpelly, *A French Reader for Beginners.* Prerequisite: A1, or one year of high-school French.

5 units, winter and *spring quarters

winter (Stauf, Requet) MTWThF 8, 9, 11; spring (Barker) MTWThF 9

Winter, 90 (3 sections); spring, 22

A3. Elementary French (continued).—Thorough review of grammar. Oral work. Reading: About *Le Roi des Montagnes.* Prerequisite: A2, or equivalent.
5 units, autumn and *spring quarters
autumn (Requet) MTWThF 9; spring (Stauf, Requet) MTWThF 8, 9, 11
Autumn, 17; spring, 78 (3 sections)

A3a. Elementary French, Special Course.—Grammar and Composition. Johnston and Elmore, *A French Grammar for High Schools and Colleges.*
Intended for two classes of students: (1) for those who are credited with one year and a half of high-school French; (2) for those who are technically entitled to enter Second-Year French, but whose preparation is insufficient. (See the general announcement above.)
3 units, autumn quarter (Wirt) MWF 11
Autumn, 24

A21. Second-Year French.—Grammatical review. Composition, Reading: Holbrook, *Living French;* Molière, *L'Avare;* France, *Pierre.* Course conducted as far as possible in French. Prerequisite: A3, or two years of high-school French.
5 units, autumn and *winter quarters
autumn (Schwartz, Smith, Anderson, Barker) MTWThF 9, 10; winter (Barker) MTWThF 9
Autumn, 95 (4 sections); winter, 36

A22. Second-Year French (continued).—Grammar and Composition, Reading: Holbrook, *Living French;* Lesage, *Gil Blas;* Pailleron, *Le Monde où l'on s'ennuie.* Conducted as far as possible in French. Prerequisite: A21, or three years of high-school French.
5 units, winter and *spring quarters
winter (Schwartz, Anderson, Barker, Donnay) MTWThF 9, 10; spring (Barker) MTWThF 9
Winter, 79 (4 sections); spring, 23

A23. Second-Year French (continued).—Sand, *Les Ailes de courage;* Rostand, *Cyrano de Bergerac.* Conducted in French. Prerequisite: A22, or equivalent.
5 units, spring quarter (Anderson, Barker, Donnay) MTWThF 9, 10
Spring, 81 (3 sections)

A26. French Scientific Reading.—Intended for engineers. Daniels, *French Scientific Reader.* Prerequisite: A3.
3 units, autumn quarter (Donnay) TThS 11
Autumn, 20

A27. French Scientific Reading (continued).
3 units, winter quarter (Wirt) TThS 11
Winter, 27

A28. French Scientific Reading (continued).—Greenfield and Babson, *Industrial and Scientific French.*
3 units, spring quarter (Wirt) TThS 11
Spring, 35

A30. Directed Reading.—Prerequisite: A23. Readings and one conference period a week for oral reports. Enrollment limited, may not be repeated for credit.
1 or 2 units per quarter
autumn and winter (Schwartz) TW 2:05–3:05; spring (Anderson) TTh 1:05
Autumn, 40 (2 sections); winter, 36 (3 sections); spring, 30

A40. French Conversation.—Texts illustrating French life are memorized to facilitate conversation in correct French. Prerequisite: A21, or equivalent.
2 units (Schwartz) [Not given in 1928–29]

A60. Intermediate French Composition and Conversation.—Prerequisite: A 21 or equivalent.
3 units, summer quarter (Broquet) MWF 9
Summer, 7

II. Advanced and Graduate Courses

A101. Commercial French.—Letter-writing and introduction to commercial vocabulary; Malakis, *Le Français du commerce;* Fish, *French Commercial Correspondence.* Prerequisite: A23 or equivalent.
3 units (Schwartz) [Not given in 1928–29]

A110. French Pronunciation.—Training in French pronunciation by means of practical phonetics. This course is of special interest to prospective teachers. Prerequisite: A23, or equivalent.
3 units, winter quarter (Smith) MWF 1:05
Winter, 9

A111. Third-Year French Composition and Conversation.—Composition and dictation. Coindreau and Lowe, *French Composition Book.* Conducted in French. Prerequisite: A23, or four years of high-school French.
3 units, autumn quarter (Schwartz, Johnston) MWF 8, 11
Autumn, 30 (2 sections)

A112. Third-Year French Composition (continued).—Coindreau and Lowe, *French Composition Book.* Prerequisite: A111, or equivalent.
3 units, winter quarter (Schwartz, Anderson) MWF 8, 11
Winter, 35 (2 sections)

A113. Third-Year French Conversation (continued).—Bertenshaw and Janau, *French Composition.* Prerequisite: A112, or equivalent.
3 units, spring quarter (Smith) MWF 11
Spring, 24

A121. Fourth-Year French Composition.—Translation of connected English prose into French. Original composition. Dictation. Prerequisite: A113.
3 units, autumn and *summer quarters autumn (Smith) MWF 10
summer (Françon) MWF 8
Autumn, 4; summer, 12

A122. Fourth-Year French Composition(continued).
3 units, winter quarter (Smith) MWF 10
Winter, 4

A123. Fourth-Year French Composition (continued).
3 units, spring quarter (Smith) MWF 10
Spring, 4

A130. French Classics.—Reading in class of masterpieces of French literature. Prerequisite: A23, or equivalent.
4 units, autumn quarter (Schwartz) MWF 10
Autumn, 13

A131. Renan.—Reading and interpretation of the *Souvenirs d'Enfance et de Jeunesse* and selections from his other works.
2 units (Anderson) [Not given in 1928–29]

A132. Rousseau.—Reading and interpretation of selections from Jean Jacques Rousseau.
2 units (Anderson) [Not given in 1928–29]

A133. Mme de Staël.—*De l'Allemagne,* reading and interpretation.
2 units (Anderson) [Not given in 1928–29]

A134. Taine.—Reading and discussion of V. Giraud's *Pages Choisies de Taine.*
2 units (Anderson) By arrangement
Winter, 1

A135. Classical French Moralists.—Reading and interpretation of selections from Pascal, La Rochefoucauld, La Bruyère, and Vauvenargues.
2 units (ANDERSON) [Not given in 1928–29]

A136. Voltaire.
3 units, spring quarter (ANDERSON) TTh 10
Spring, 45

A140. Outline Course in the History of French Literature.—Strachey, *Landmarks in French Literature;* Anderson, *Illustrations of Early French Literature;* Vreeland and Michaud, *Anthology of French Prose and Poetry.* Outside reading. Conducted in English. Prerequisite: A23, or equivalent.
6 units, autumn and *spring quarters (ANDERSON) MTWThF 11
Autumn, 47; spring, 2

A141. The Modern French Drama.—Lectures in French. Outside reading, discussions, and reports. Prerequisite: A23, or equivalent.
3 units (SMITH) [Not given in 1928–29]

A142. The Modern French Novel.—Lectures in French on the history of the novel in France since 1800. Extensive readings. Prerequisite: A23, or equivalent.
4 units, summer quarter (FRANÇON) TWThF 11
Summer, 21

A143. French Lyric Poetry.—Course conducted in French. Preliminary study of medieval poetical forms, leading to extensive reading in class of nineteenth-century poets. Intended to familiarize students with the best-known masterpieces. Textbooks: *Oxford Book of French Verse,* Henning's *French Lyrics of the Nineteenth Century.* Prerequisite: A23, or equivalent.
4 units (SCHWARTZ) [Not given in 1928–29]

A145. French Historians.—Lectures on French Historians of the nineteenth century. Reading of selections. Conducted in French. Prerequisite: A23, or its equivalent.
3 units (ANDERSON) [Not given in 1928–29]

A150. Hugo.—His period, life, and works. Prerequisite: A23, or the equivalent.
3 units, summer quarter (JOHNSTON) By arrangement
Summer, 1

A151. Molière.—The complete works are read, with special attention to the characters in the plays. Readings and reports. Prerequisite: A23, or equivalent.
4 units, winter quarter (SCHWARTZ) MTWF 10
Winter, 11

A152. Literary Criticism.—Lectures on the relation between philosophy and literature.
3 units, winter quarter (ANDERSON) MWF 9
Winter, 25

A161. French Literature in the Seventeenth Century (exclusive of the drama).—Lectures in French. Reading and interpretation of representative texts. Outside reading and reports. Prerequisite: A23, or the equivalent.
4 units (SMITH) By arrangement
Autumn, 2

A162. French Literature in the Eighteenth Century.—A study of the main ideas and tendencies of the period as illustrated by the lives and works of its most important authors. Outside reading and reports. Conducted in French. Prerequisite: A23, or the equivalent.
3 units (SMITH) [Not given in 1928–29]

A163. The Romantic Movement in France.—A study of the main features of romanticism and of the most important representatives of the French romantic movement. Lectures in French. Outside reading. Prerequisite: A140, or equivalent.
3 units (ANDERSON) [Not given in 1928–29]

A164. Sixteenth Century.—Reading and interpretation of representative selections. Lectures and reports at the discretion of the instructor.
3 units, spring quarter (SMITH) MWF 2:05–3:05
Spring, 8

A170. Corneille.
3 units (JOHNSTON) By arrangement
Winter, 1

A171. French Tragedy.—Lectures on the art of French tragedy, with interpretation and discussion of selected plays. Outside reading and reports. Prerequisite: A140, or equivalent.
3 units, autumn and *summer quarters (JOHNSTON) W 2:05–4:05
Autumn, 12; summer, 17

A190. Modern French Syntax.—Review of French grammar with lectures and discussion. Modern usage in the light of its psychological and historical development. This course is designed to be of special use to teachers.
2 units, winter and summer quarters (JOHNSTON) (winter) TTh 10
Winter, 13; summer, 11 (summer) TTh 2:05–3:05

[**Teachers' Course in French.**—See Education 209.]

III. PRIMARILY FOR GRADUATES

A201. Introduction to the Study of Old French.—Reading and interpretation of Old French texts selected from Bartsch-Wiese, *Chrestomathie de l'Ancien Français,* with a study of Old French Phonology and Morphology.
3 units, winter quarter (JOHNSTON) MWF 2:05–3:05
Winter, 5

A202. French Historical Grammar.—Lectures on Old French Phonology and Morphology.
3 units (JOHNSTON) [Not given in 1928–29]

A203. French Historical Syntax.—The most important phases of modern French syntax are studied from a historical point of view. This course is intended primarily for teachers.
1 unit, autumn quarter (JOHNSTON) F 2:05–3:05
Autumn, 5

A204. Old French Literature.—French literature from the beginnings to the fifteenth century, with emphasis on the literary and social traits.
3 units (JOHNSTON) [Not given in 1928–29]

A205. French Arthurian Romances.—Lectures on the romances of the Round Table, the legend of the Holy Grail, and the legend of Tristan and Iseult. Outside reading and reports.
2 units, winter quarter (JOHNSTON) Th 3:05–5:05
Winter, 5

A240. Graduate Thesis.
3 to 5 units per quarter By arrangement
Summer, 3

A250. French Seminary.—*Floire et Blancheflor.*
2 units (JOHNSTON) [Not given in 1928–29]

A251. French Seminary.—The Old French Epic.
3 units (JOHNSTON) [Not given in 1928–29]

B. SPANISH

I. Elementary and Intermediate Courses

B1. Elementary Spanish.—The elements of pronunciation, grammar, reading, and conversation. Texts: Espinosa and Allen, *Beginning Spanish,* Lessons I–XXV; Navarro-Espinosa, *A Primer of Spanish Pronunciation,* pages 1–74.

5 units, autumn and *winter quarters
autumn (Cuthbertson, Espinosa, Jr.) MTWThF 9, 11;
winter (Espinosa, Jr.) MTWThF 9

Autumn, 57 (2 sections); winter, 21

B2. Elementary Spanish (continued).—Texts: Espinosa and Allen, *Beginning Spanish,* Lessons XXVI–XLVII; Navarro-Espinosa, *A Primer of Spanish Pronunciation,* pages 75–113; Espinosa, *First Spanish Reader,* Lessons XV–XXXIII.

5 units, winter and *spring quarters
winter (Cuthbertson, Espinosa, Jr.) MTWThF 9, 11;
Winter, 45 (2 sections); spring, 17 spring (Burk) MTWThF 9

B3. Elementary Spanish (continued).—Texts: Espinosa and Allen, *Beginning Spanish,* Lessons XLVIII–LXVIII; Quintero, *La Muela del rey Farfán;* Allen, *Fábulas y Cuentos.*

5 units, autumn and *spring quarters autumn (Espinosa, Jr.) MTWThF 9;
spring (Espinosa, Jr., Cuthbertson) MTWThF 9, 11

Autumn, 14; spring, 38 (2 sections)

B3a. Elementary Spanish, Special Course.—Grammar and Composition. A rapid review of Espinosa and Allen, *Beginning Spanish,* Lessons VII–LX.

Intended for two classes of students: (1) for those who are credited with one year and a half of high-school Spanish; (2) for those who are technically entitled to enter Second-Year Spanish, but whose preparation is insufficient. (See the last two paragraphs of the general announcement above.)

3 units, autumn quarter (Cuthbertson) MWF 11

Autumn, 26

B21. Second-Year Spanish.—Review of grammar, with abundant practice in conversation and composition. Reading aloud in Spanish, with careful drill in pronunciation. Reading and interpretation of Spanish texts, with a minimum of translation. Conversation in Spanish based on the texts read. Bimonthly tests in translation and written reproduction of Spanish texts or short stories. Conducted mainly in Spanish.

Composition and conversation (TTh). Text: Espinosa-Allen, *Elementary Spanish Grammar,* Lessons XV–XLIX.

Reading, pronunciation, and conversation (MWF). Texts: Benavente, *El príncipe que todo lo aprendió en los libros;* Palacio Valdés, *La Hermana San Sulpicio.*

5 units, autumn and *winter quarters
autumn (Allen, Coester) MTWThF 9, 11; winter (Espinosa, Jr.) MTWThF 8

Autumn, 61 (2 sections); winter, 17

B22. Second-Year Spanish (continued).—Composition and conversation (TTh). Texts: Espinosa, *Elementary Spanish Composition and Conversation.* For grammar review and reference, Espinosa-Allen, *Elementary Spanish Grammar.* Original exercises in Spanish composition. Final examinations on all regular and irregular verbs and the use of the subjunctive.

Reading, pronunciation, and conversation (MWF). Texts: Martínez Sierra, *Teatro de Ensueño;* Pardo Bazán, *El Tesoro de Gastón.*

5 units, winter and *spring quarters
winter (ALLEN, COESTER) MTWThF 9, 11; spring (ESPINOSA, JR.) MTWThF 8
Winter, 41 (2 sections); spring, 17

B23. Second-Year Spanish (continued).—Composition and conversation (TTh). Oral drill in conversation and the mastery of a correct pronunciation. Short stories, and original compositions. Advanced Spanish grammar. Text: Seneca, *Spanish Composition.*

Reading and interpretation of Spanish texts (MWF). Texts: Martínez Sierra, *Canción de Cuna;* Coester, *Cuentos de la América Española.*

5 units, spring quarter (ALLEN, COESTER) MTWThF 9, 11
Spring, 34 (2 sections)

B26. Spanish Scientific Reading.—Intended for engineers. Prerequisite: B3.

3 units, autumn quarter (BURK) TThS 11
Autumn, 12

B27. Spanish Scientific Reading (continued).

3 units, winter quarter (BURK) TThS 11
Winter, 21

B28. Spanish Scientific Reading (continued).

3 units, spring quarter (ESPINOSA, JR.) TThS 11
Spring, 20

B30. Directed Reading.—Prerequisite: B23. Readings and one conference period a week for oral reports. Enrollment limited, may not be repeated for credit.

1 or 2 units per quarter autumn (ESPINOSA, JR.) T 1:05, T 2:05; winter and spring (CUTHBERTSON) T 1:05, W 1:05
Autumn, 27 (2 sections); winter, 22 (2 sections); spring, 11

B40. Spanish Conversation.—Easy Spanish stories and exercises. Prerequisite: B3, or equivalent.

3 units (ESPINOSA) [Not given in 1928–29]

B60. Intermediate Spanish Conversation and Composition.

3 units, summer quarter (PÉREZ) MWF 1:05
Summer, 10

II. ADVANCED AND GRADUATE COURSES

B101. Commercial Spanish.—Review of grammar and introduction to commercial vocabulary. Prerequisite: B23.

3 units (COESTER) [Not given in 1928–29; to be offered in 1929–30]

B102. Commercial Spanish.—Letter-writing and introduction to commercial practice. Prerequisite: B101.

3 units (COESTER) [Not given in 1928–29; to be offered in 1929–30]

B103. Commercial Spanish.—Letter-writing (continued). Study of commercial documents. Writing of advertisements and circular letters. Prerequisite: B102 or equivalent.

3 units (COESTER) [Not given in 1928–29; to be offered in 1929–30]

B110. Spanish Pronunciation.—Lectures and practical exercises in the elements of Spanish pronunciation. This course should be taken by Spanish majors in the first year.

2 units, spring and summer quarters
spring (ESPINOSA, JR.) TTh 10; summer (ESPINOSA) TWThF 11
Spring, 16; summer, 14

B111. Advanced Spanish Composition and Conversation.—Review of grammar, with reading and interpretation of literary texts. Oral and written reproduction of short stories and literary material. Original exercises in composition. Prerequisites: Courses B21, B22, B23.
3 units, autumn quarter (Coester, Espinosa, Jr.) MWF 9, 10
Autumn, 42 (2 sections)

B112. Advanced Spanish Composition and Conversation (continued). —Prerequisite: B111.
3 units, winter quarter (Espinosa) MWF 9, 11
Winter, 21 (2 sections)

B113. Advanced Spanish Composition and Conversation (continued). —Translation into Spanish of select English prose. Prerequisite: B112.
3 units, spring quarter (Espinosa) MWF 9
Spring, 8

B120. La actualidad en el mundo español.
3 units, spring quarter (Espinosa) MWF 11
Spring, 26

B121. Curso de composición y estilo.—En este curso se estudian algunas obras literarias en prosa para modelos de estilo. Composiciones originales cada semana. Gramática de referencia: Bello-Cuervo, *Gramática de la Lengua Castellana.* Prerequisite: B113.
3 units (Espinosa) [Not given in 1928–29]

B122. Curso de composición y estilo (*continuación*).
3 units (Espinosa) [Not given in 1928–29]

B123. Curso de composición y estilo (*continuación*).
3 units (Espinosa) [Not given in 1928–29]

B130. Spanish Classics.—A study of the principal authors of the classical period. Representative texts are read of Cervantes, Lope de Vega, Calderón, Alarcón, Tirso de Molina, as well as selections from Ford's *A Spanish Anthology.* Open to students who have completed Courses B21, B22, B23, or their equivalents.
3 units, autumn and *summer quarters (Allen, Espinosa) MWF 11
Autumn, 20; summer, 1

B138. Modern Spanish Dramatists.—A study of Galdós, Benavente, Martínez Sierra, and others. Lectures in English with assigned readings in English or Spanish. Open to juniors and seniors in all departments.
2 units (Espinosa) [Not given in 1928–29]

B140. Spanish Literature.—Outline course. Fitzmaurice-Kelly, *Historia de la literatura española.* Lectures and recitations. Prerequisite: B130.
3, 4, or 5 units, winter quarter (Allen) MWF 11
Winter, 11

B141. Teatro Español Contemporáneo.—(*a*) Breve resumen de la historia del teatro español en el siglo XIX: Rivas, Gutiérrez, Zorrilla, Bretón de los Herreros, Ayala, Echegaray. (*b*) Estudio de los dramáticos contemporáneos, con atención especial a Galdós, Jacinto Benavente, los Quinteros, Eduardo Marquina y Martínez Sierra. Prerequisites: B21, B22, B23, or their equivalents.
3 or 5 units (Espinosa) [Not given in 1928–29]

B142. Modern Spanish Novel.—A study of the modern Spanish novel and its relation to the development of the novel in France and other European countries. Lectures and collateral readings. Prerequisites: B21, B22, B23, or their equivalents.
3 units (Allen) [Not given in 1928–29]

B143. Early Spanish Lyric Poetry.—A study of the various schools of lyric poets, as the Galacian, the Italian, the National, etc. Prerequisite: B130.
3 units (ALLEN) [Not given in 1928–29]

B144. Modern Spanish Lyrics.—Prerequisites: B21, B22, B23, or their equivalents.
2 units (ALLEN) [Not given in 1928–29]

B153. Spanish-American Literature.—General outline. The writings of Spanish Americans are studied from the point of view of the nationality of the writers and as the product of differing political, social, and geographic conditions. Prerequisite: B23.
3 units, autumn quarter (COESTER) MWF 10
Autumn, 10

B154. Argentine Literature.—The aim of this course is to acquaint the student with the history and mental characteristics of the Argentines through the medium of their own literary productions. Prerequisite: B23.
3 units, winter quarter (COESTER) MWF 10
Winter, 7

B155. The Modernista Movement in America and Spain.—Rubén Darío, Gutiérrez Nájera, Silva, Chocano and their influence on Spanish lyric poets since 1898. Prerequisite: B111, or equivalent.
3 units, spring quarter (COESTER) MWF 9
Spring, 13

B156. Hispanic American Life and Literature.—Open to majors in any department. Knowledge of Spanish not required.
4 units (COESTER) [Not given in 1928–29]

B162. Spanish Literature in the Eighteenth Century.
3 units, spring quarter (ALLEN) MWF 11
Spring, 8

B170. La literatura española del Siglo de Oro.—Conferencias, lecturas y trabajos especiales de investigación.
3 units, summer quarter (ALONSO) MWF 10
Summer 22

B176. Literatura española contemporánea.—Historia de la literatura española, novela, teatro, poesía lírica, crítica literaria e histórica, desde 1898 hasta el dia de hoy. Conferencias, lecturas y estudios especiales.
4 units, summer quarter (ALONSO) MTWTh 9
Summer, 17

B188. Fonética Española.—Conferencias y ejercicios prácticos. Navarro Tomás, *Manual de Pronunciación Española.*
2 units (ESPINOSA) [Not given in 1928–29]

B200. Problems of Teaching Spanish.—A consideration of the important questions of Spanish pronunciation, grammar, reading, and literary interpretations, together with a discussion of the general questions of methods of teaching as applied to the teaching of elementary and advanced Spanish. Pedagogical bibliography and school texts. Practice teaching.
2 units, spring quarter (ESPINOSA) TTh 11
Spring, 10

[**Teachers' Course in Spanish.**—See Education 222.]

III. PRIMARILY FOR GRADUATES

B201. Introduction to the Study of Old Spanish.—Lectures on Old Spanish Phonology and Morphology, with linguistic exercises based on *El Cantar de mío Cid.* Ford, *Old Spanish Readings.*
3 units, winter and *summer quarters (ESPINOSA) winter, MWF 10; summer, TWTh 1:05
Winter, 9; summer, 15

B202. Spanish Historical Grammar.—Lectures and study of Old Spanish texts.
3 units, spring quarter (Espinosa) MWF 10
Spring, 6

B204. Old Spanish Literature.—Spanish literature from the earliest times to the beginning of the fifteenth century. Lectures, reading of texts, and assigned topics.
3 units (Allen) [Not given in 1928–29]

B240. Graduate Thesis.
3 to 5 units per quarter
Winter, 3; spring, 6; summer, 7

B241. Origins of Spanish Drama.—A history of the drama from the earliest times to its full development with Lope de Vega. Lectures and collateral reading.
2 units, winter quarter (Allen) TTh 11
Winter, 13

B251. Calderón.—Lectures and assigned topics.
3 units (Allen) [Not given in 1928–29]

B252. Lope de Vega.—Lectures and assigned topics.
3 units, autumn quarter (Allen) TTh 11
Autumn, 12

B253. The Classical Dramatists.—Tirso de Molina, Ruiz de Alarcón, Rojas Zorilla, and Moreto.
3 units, autumn quarter (Allen) By arrangement
Autumn, 1

B254. Cervantes.—Lectures and assigned topics.
3 units (Allen) [Not given in 1928–29]

B257. Seminary in Spanish-American Literature.—Lectures and assigned topics. Prerequisite: B153.
3 units, winter quarter (Coester) T 2:05–4:05
Winter, 4

B260. Seminary in Spanish Literature.—History of Spanish epic poetry with special attention to the Romancero. Lectures and investigations on special topics.
3 to 5 units, summer quarter (Espinosa) M 2:05–4:05
Summer, 19

C. ITALIAN

I. Elementary and Intermediate Courses

C1. Elementary Italian.—Wilkins, *First Italian Book; Farina, Fra le corde di un contrabbasso.*
5 units, autumn quarter (Stauf) MTWThF 10
Autumn, 17

C2. Elementary Italian (continued).—Grandgent's *Italian Grammar.* Conversation. Wilkins and Marinoni, *L'Italia.* Goggio, *Due Commedie Moderne.* Prerequisite: C1, or equivalent.
5 units, winter quarter (Stauf) MTWThF 10
Winter, 16

C3. Elementary Italian (continued).—Review of grammar. Composition and conversation. Goldoni, *La Locandiera.* Manzoni, *I Promessi Sposi* (edit. Geddes and Wilkins). Prerequisite: C2, or equivalent.
5 units, spring quarter (Stauf) MTWThF 10
Spring, 12

C21. Second-Year Italian.—Review of grammar. Composition and conversation. Reading of selected prose and poetry of the nineteenth and twentieth centuries, with a minimum of translation and particular attention to pronunciation. Collateral reading and reports. Prerequisite: C3, or equivalent.
3 units, autumn quarter (Smith) MWF 2:05
Autumn, 5

C22. Second-Year Italian (continued). -Prerequisite: C21, or equivalent.
3 units, winter quarter (Smith) MWF 11
Winter, 5

C23. Second-Year Italian (continued).—Prerequisite: C22, or equivalent.
3 units, spring quarter (Smith) MWF 9
Spring, 3

C30. Directed Reading.
2 units, summer quarter (Johnston)
Summer, 1

II. Advanced and Graduate Courses

C111. Third-Year Italian Composition.—Translation of connected English prose into Italian. Original composition. Conducted in Italian. Prerequisite: C23, or four years of high-school Italian.
3 units (Smith) [Not given in 1928–29]

C112. Third-Year Italian Composition (continued).
3 units (Smith) [Not given in 1928–29]

C140. Lectures on Italian Literature (in English).—Lectures on the principal Italian writers. Reading of their works in translation. Added credit is given to students who do their reading in Italian.
2 or 4 units (Anderson) [Not given in 1928–29]

C150. Dante and the *Divine Comedy* (in English).—Reading and interpretation of the *Divine Comedy* (in translation), lectures on Dante and the *Divine Comedy*, and the principal problems of medieval life and thought reflected in the poem. Outside reading and reports. Open to juniors and seniors in all departments.
2 units, summer quarter (Johnston) TTh 10
Summer, 18

C151. Advanced Italian.—Dante, *La Divina Commedia*. Study and interpretation of the text; discussion of the literary problems of the poem.
3 units (Johnston) [Not given in 1928–29]

C152. Advanced Italian (continued).
3 units (Johnston) [Not given in 1928–29]

C153. Advanced Italian (continued).
3 units (Johnston) [Not given in 1928–29]

C170. Italian Classics of the Thirteenth and Fourteenth Centuries (exclusive of the *Divine Comedy*).—Reading and interpretation of representative selections.
3 units (Smith) [Not given in 1928–29]

C171. Italian Classics of the Thirteenth and Fourteenth Centuries (continued).—Reading and interpretation of representative selections.
3 units (Smith) [Not given in 1928–29]

C172. Italian Classics of the Fifteenth and Sixteenth Centuries.—Reading and interpretation of representative selections.
3 units (Smith) [Not given in 1928–29]

C173. Italian Classics of the Fifteenth and Sixteenth Centuries (continued).
3 units (SMITH) [Not given in 1928–29]

D. PORTUGUESE

D1. Elementary Portuguese.—Drill on pronunciation. Elements of grammar. Reading of easy texts.
5 units, autumn quarter [Not given in 1928–29]

D2. Elementary Portuguese (continued).—Grammar. Composition. Conversation. Reading. Prerequisite: D1, or equivalent.
5 units, winter quarter [Not given in 1928–29]

D3. Elementary Portuguese (continued).—Prerequisite: D2, or equivalent.
5 units, spring quarter [Not given in 1928–29]

E. GENERAL ROMANCE PHILOLOGY

PRIMARILY FOR GRADUATES

E201. Phonetics and General Linguistics.—Lectures on phonetics and the philosophy of grammar, the illustrations being taken chiefly from the history of Latin and Romanic languages.
4 units, spring quarter (ANDERSON) TTh 2:05–4:05
Spring, 5

E202. The Romantic Movement.—Lectures in English giving a comparative view of romanticism in European and American literatures; assigned readings in English, French, or Spanish to meet the needs of the student. Open to graduates and undergraduates.
3 units, spring quarter (COESTER) MWF 2:05
Spring, 3

E210. Introduction to the Study of Old Provençal.—Reading of selected passages from Appel's *Provenzalische Chrestomathie,* with a study of Old Provençal Phonology and Morphology.
3 units, winter quarter (SMITH) MWF 3:05
Winter, 3

E211. Romance Versification.—The fundamental principles of Romance verse structure, with particular attention to French and Spanish, lectures and practical exercises.
3 units (ESPINOSA) [Not given in 1928–29]

E220. Vulgar Latin and Introduction to Romance Philology.—The phonology and morphology of Vulgar Latin; a study of Vulgar Latin texts of the sixth, seventh, and eighth centuries, showing the development of Latin into Romance, especially Spanish, French, and Italian.
3 units (ESPINOSA) [Not given in 1928–29]

E221. Petronius.—[See Classical Literature B138.]

F. GENERAL COURSES

[These series F1, 2, 3, 4, and F101, 102, 103, 104, are offered in alternate years.]

FOR UNDERGRADUATES

[These courses are given in English. A reading knowledge of French is desirable but not required. Prerequisite: a course in European History.]

F1. French Civilization.—The Foundations and the Middle Ages.
2 units, winter quarter (GUÉRARD) TTh 8
Winter, 32

F2. French Civilization.—The Classical Age.
2 units, spring quarter (Guérard) TTh 8
Spring, 37

F3. French Civilization.—The nineteenth century.
2 units, summer quarter (Guérard) TTh 8
Summer, 15

F4. French Civilization.—The twentieth century.
2 units (Guérard) [Not given in 1928–29]

Advanced and Graduate Courses

[These courses are conducted entirely in French. Prerequisites: A23 or its equivalent and a course in European History.]

F101. French Civilization.—The Foundations and the Middle Ages.
2 units (Guérard) [Not given in 1928–29]

F102. French Civilization.—The Classical Age.
2 units (Guérard) [Not given in 1928–29]

F103. French Civilization.—The nineteenth century.
2 units (Guérard) [Not given in 1928–29]

F104. French Civilization.—The twentieth century.
2 units (Guérard) [Not given in 1928–29]

SLAVIC

Henry Lanz, Assistant Professor

SLAVIC LANGUAGES

A1. Elementary Russian.—It is the object of this course to put the students in possession of the elements of the Russian language. Beginning with a study of the alphabet, it covers the course in morphology, syntax, simple conversation, and reading of the easy Russian texts (short stories of Leo Tolstoy). Bondar, *Simplified Russian Method.*
4 units, autumn quarter (Lanz) MTThF 8
Autumn, 6

A2. Elementary Russian (continued).—The study of the aspects of the verbs and advanced practice in conversation and reading.
4 units, winter quarter (Lanz) MTThF 8
Winter, 5

A3. Elementary Russian (continued).—Thorough review of grammar; reading and conversation (Bondar).
4 units, spring quarter (Lanz) MTThF 8
Spring, 3

A4. Commercial Russian.—The object of this course is merely practical; it is intended to put the students in possession of the commercial vocabulary and make them able to transact business in Russian language. Special attention is given to the composition of business letters. Prerequisites: Slavic A1, A2, A3.
4 units, summer quarter (Lanz) [Not given in 1928–29]

A6. Conversational Russian.—For the beginners.
2 units, summer quarter (Lanz) [Not given in 1928–29]

A21. Second-Year Russian.—Reading of Pushkin and Turgenev. Prac-

tice in conversation and composition on the basis of the material read. Forbes, *Russian Grammar.*
3 units, autumn quarter (Lanz) MWF 9
Autumn, 2

A22. Second-Year Russian.—Chekhov, Stories.
3 units, winter quarter (Lanz) MWF 9
Winter, 2

A23. Second-Year Russian.—Reading of modern prose and poetry.
3 units, spring quarter (Lanz) MWF 9
Spring, 2

A105. Individual Work.—Translation of documents in the Hoover collection.
(Lanz) By arrangement
Autumn, 2; winter, 1

A131. Third-Year Russian.—Individual work.
3 units autumn quarter (Lanz) [Not given in 1928–29]

A132. Third-year Russian.—Individual work.
3 units, winter quarter (Lanz) [Not given in 1928–29]

A133. Third-Year Russian.—Individual work.
3 units, spring quarter (Lanz) [Not given in 1928–29]

SLAVIC LITERATURE

C1. Slavic Civilization.—This course is intended to acquaint students with the elements of Slavic history, literature, and art. Lectures in English, readings from English translations.
2 units, autumn quarter (Lanz) TTh 10
Autumn, 41

C100. Russian Realism.—It is an attempt to present the literary history of Russia as an evolution of realistic forms. Special attention is paid to the literature of the nineteenth century. Knowledge of Russian is not required. (This course is acceptable for credit toward the degree of Bachelor of Arts in the School of Letters if combined with Course C100*a*.)
5 units, autumn and spring quarters (Lanz) MTWThF 9
Autumn, 30; spring, 75

C100a. Russian Realism. (Supplementary Course.)—A reading course in Russian to be taken in conjunction with Course C100.
No credit (Lanz) By arrangement

C101. Polish Romanticism.—It is the object of this course to explain the development of Polish literature in the light of the social and historical conditions that lead to the growth of Romanticism in Poland. Knowledge of Polish is not required.
2 units, winter quarter (Lanz) TTh 9
Winter, 16

C102. Leo Tolstoy.—His life and work. Special attention paid to exposition and criticism of Tolstoy's philosophical and religious doctrines. Lectures and readings from English translations. (This course is acceptable for credit toward the degree of Bachelor of Arts in the School of Letters if combined with Course C102*a*).
3 units, winter and summer quarters (Lanz) MWF 9
Winter, 24; summer, 10

C102a. Leo Tolstoy. (Supplementary Course.)—A reading course in Russian to be taken in conjunction with Course C102.
No credit (Lanz) [Not given in 1928–29]

C103. Theodore Dostoyevsky.—His life and work. (This course is acceptable for credit toward the degree of Bachelor of Arts in the School of Letters if combined with Course C103*a*.)
2 units, spring quarter (LANZ) [Not given in 1928–29]

C103a. Theodore Dostoyevsky. (Supplementary Course.)—(A reading course in Russian to be taken in conjunction with Course C103.)
No credit (LANZ) [Not given in 1928–29]

C104. Russian Literature of the Twentieth Century, with special emphasis on the revolutionary period.
2 units, summer quarter (LANZ) TTh 9
Summer, 11

C105. History of Slavic Literatures.—This is a course specially designed for the students of the summer quarter. It is intended to give a brief account of the folklore and literatures of Slavic nations, including Russia, in connection with their history and their religious development. Lectures in English, and readings from English translations.
5 units, summer quarter (LANZ) [Not given in 1928–29]

C106. Russian Art.—This course is a systematic attempt to explain the development, the underlying principles, and the experimental technique of Russian art in its four principal divisions: architecture, painting, sculpture, and music. The problems of stage presentation will be discussed in connection with modern developments in Russian opera. Special attention is paid to modern art, the study of which is greatly facilitated by the excellent art collection now in possession of the Hoover War Library. The course is conducted with the use of lantern slides.
2 units, summer quarter (LANZ) TTh 3–4
Summer, 11

LIBRARY

George Thomas Clark, Director of the University Libraries, Emeritus

Nathan Van Patten, Director of the University Libraries
Charles V. Park, Assistant Librarian
Helen Binninger Sutliff, Chief Cataloguer
Alice Newman Hays, Reference Librarian
Elizabeth Hadden, Chief of Order Division
Minna Stillman, Document Librarian
Louise Ophüls, Medical Librarian
Nina Almond, Hoover War Librarian
James Emmet Brenner, Law Librarian
Solon Shedd, Curator, Branner Geological Library

The Library is open during term time on week days from 8:00 A.M. to 10:00 P.M., except on Saturdays, when it is closed at 5:00 P.M. The Sunday hours are from 2:00 P.M. to 6:00 P.M. During vacations the hours are from 8:30 A.M. to 4:30 P.M., Saturdays to 12:30 P.M. The shelves are open to members of the faculty and, on the recommendation of their instructors, to students engaged in advanced work. Books, other than works of reference, not required for class use or otherwise restricted, are available under prescribed rules for circulation to those entitled to the privileges of the Library. A handbook giving information relative to the Library and how to use it has been published and may be obtained upon request.

The Library is available for use by all registered students without the payment of additional fees. Visitors regularly attending lecture courses or other University exercises, but not registered, are entitled to the privileges of the Library upon payment of a fee of $1.25 per quarter.

Including the departments of Law and Medicine, the Library contains upward of 435,000 volumes, and its maintenance and growth are insured by the income of the Jane Lathrop Stanford Jewel Fund, certain other special funds, and by fees.

The Library building is well adapted to meet the needs of advanced and graduate students. It contains nine rooms in which seminar classes may be held and one large room which serves as a reading-room for students in seminar classes; and tables on each floor of the stack made it possible for any graduate student to work in easy reach of the material in his field.

On the first floor—in the Hoover War Library and in the Document Room—are two collections of especial interest to research workers in the fields of history and economics.

The Document Division brings together the Library's collection of city, state, and federal documents. It is especially strong in the publications of the United States, Great Britain, Canada, and Australia, and those of other countries are being added as fast as circumstances permit. The collection now numbers 40,000 volumes besides much unbound material.

The Hoover War Library contains some 150,000 printed and manuscript items on all aspects of the World War, 1914–18, and for the period of reconstruction since the war. It is rich in government documents, in delegation propaganda at the peace conferences, in files of the publications of social

and political societies, and in newspapers. A special reading-room facilitates the use of the collection.

The Hopkins Railway Library.—A collection of more than 10,000 volumes and pamphlets dealing with the subject of transportation. In 1892 Mr. Timothy Hopkins, of San Francisco, presented to the University his private library on railroads—about 2,000 books—personally providing for its maintenance and growth for many years. The collection is general in scope, intended to include all subjects touching on the building, maintenance, and operation of railways; and is especially rich in state and federal reports, as well as in reports of individual railroads both in the United States and Europe, with much material pertaining to their history.

Important divisions of the University Library, although separately housed, are:

The Law Library.—A library of about 35,000 volumes, selected with care and adequate for the study of English and American law. It contains practically complete sets of the reports of the courts of England, Scotland, Ireland, Canada, the United States, and the several states, together with a valuable collection of statutes, treatises, and periodicals.

The Lane Medical Library.—Founded by the directors of Cooper Medical College in accordance with the bequest of Mrs. L. C. Lane, and located opposite the other medical buildings, on the corner of Sacramento and Webster Streets, San Francisco. The library contains about 68,000 volumes and is particularly rich in its collection of medical and allied periodicals.

Two important special collections are the Barkan library of ophthalmology and oto-laryngology, endowed by Dr. A. Barkan, professor emeritus of ophthalmology, and the new library on the history of medicine, supported by Stanford University and Dr. A. Barkan conjointly. To date this library contains about 5,000 volumes.

The Jordan Library of Zoölogy.—A collection consisting largely of works on ichthyology, to a considerable extent made up of author's separates, which have been accumulated by Chancellor Jordan and members of the Department of Zoölogy, bound in convenient form, indexed, and catalogued. The older authorities including Cuvier, Lacépède, Bloch, Bleeker, and Günther are well represented. These, supplemented by the proceedings of various societies and institutions, make a collection of great value to advanced students and investigators. The library is conveniently arranged in the Natural History Museum, near the laboratories and collections.

The Biology Library.—The Biology library, in Jordan Hall, is a combination of the former department libraries of Botany, Physiology, Zoölogy, and Entomology, with some works on general biology, and now comprises about 5,000 volumes, together with current files of 125 periodicals.

The Branner Geological Library.—The geological library (Room 333) is the result of twenty-five years of painstaking acquisition by Dr. John Casper Branner. It includes material relating to geology, paleontology, mineralogy, geography, mining, and metallurgy, and is well equipped with files of journals and transactions of scientific societies, and state and government reports.

SCHOOL OF MEDICINE

William Ophüls, Dean
Arthur Leonard Bloomfield, Secretary of the Medical Faculty

ADMISSION TO THE SCHOOL OF MEDICINE

The first-year class in the School of Medicine is limited to fifty students, selected, on the basis of scholarship and promise, immediately after July 15 of each year from those applicants who fulfill the following requirements:

1. Graduation from high school (or its equivalent), comprising fifteen recommended units, as defined by the University for admission to the Lower Division. (*Special students* are not admitted to registration in Medicine.)

2. Three full years of college work, totaling 135 quarter units (or an equivalent number of semester units), of a grade equivalent to that of Stanford University (counting as many grade points as there are units). The required work in these three years is that laid down by the Association of American Medical Colleges in Physics, Chemistry, Biology, and English, together with a reading knowledge of either French or German, and additional work in Chemistry and Biology as indicated below.

3. In addition to the A.A.M.C. minimum in Chemistry, the University requires Quantitative Analysis.

4. In Biological Science the University requires 15 quarter units, or 10 semester units, made up of courses in General Zoölogy (or General Biology), Comparative Anatomy of the Vertebrates, and General Vertebrate Embryology, substantially equivalent to the courses in those subjects given at Stanford University as indicated below.

No conditions are permitted.—Candidates for admission who, in June, 1929, will have completed the requirements above, except for a few units in collegiate subjects, should plan to make up these deficiencies in full by attendance at summer sessions during the summer of 1929.

In practice the foregoing requirements as applied to the pre-medical courses of Stanford University students work out about as follows:

Chemistry

Chemistry 10 (General Inorganic Chemistry), 4 units.
Chemistry 11 (General Inorganic Chemistry), 4 units.
Chemistry 12 (General Inorganic Laboratory), 4 units.
Chemistry 111 and 112 (Quantitative Analysis), 5 units.
Chemistry 127 (Organic Chemistry), 5 units.

Students without entrance credit in Chemistry take Courses 1, 2, 3, and 4, instead of 10, 11, and 12. Total, 22 (or 25) quarter units; 14⅔ (or 16⅔) semester units.

Physics

Physics 1 (Mechanics and Heat), 5 units.
Physics 2 (Electricity), 4 units.
Physics 3 (Lenses), 1 unit.
Physics 100 (Modern Physics), 3 units.
Total, 13 quarter units (8⅔ semester units).

Biology

Zoölogy 1 (General Zoölogy), 5 units or (Biology 1 and 2, 9 units).
Zoölogy 2 (Comparative Anatomy of the Vertebrates), 5 units.
Anatomy 112 (Mammalian Embryology), 5 units.
Total, 15 quarter units (10 semester units).

English

Nine quarter units (6 semester units).

French or German Reading Knowledge

This varies somewhat with the ability of the student, but implies at least the equivalent of a year's work of 15 quarter units, based upon high-school courses.

APPLICATION FOR ADMISSION

Applicants for admission to the School of Medicine, or for advanced standing in Medicine, should communicate with The Registrar, Stanford University, California; those desiring information concerning the upper classes of the School of Medicine (i.e., from the fifth to the twelfth quarters), should communicate with The Dean, Stanford University School of Medicine, 2398 Sacramento Street, San Francisco, California.

THE CURRICULUM IN MEDICINE

The required period of study for the degree of Doctor of Medicine is twelve quarters plus the interne year. The work of the first four quarters is given at Stanford University and is devoted to anatomy, bacteriology, biochemistry, histology, neurology, and physiology. The next eight quarters are devoted to work in the pharmacological, pathological, and clinical laboratories, and in the hospital wards and the out-patient department in San Francisco. The last year is spent in hospital work.

In order to correlate the work of some of the departments and to facilitate research in others, all courses in Medicine, except those in anatomy, bacteriology, biochemistry, and physiology, are given in San Francisco. By reducing the number of required hours to approximately the number decided upon by the Association of American Medical Colleges, the student's opportunity for taking optional and elective courses has been increased and time obtained for thesis work.

FEES

The tuition fee for all students registering in the School of Medicine is $100 per quarter; the hospital fee for students registered at San Francisco is $5 per quarter. The community fee for all students, except those registered at San Francisco, is $13 per quarter. This fee covers the privileges of the gymnasiums, athletic grounds, hospitals, the Stanford Union or Women's Clubhouse, and membership in the Associated Students. There is also a pavilion fee of $1 per quarter assessed upon all undergraduates by the Associated Students.

A deposit of $20 is required of all students selected for the first-year class, payable within ten days after notification of their acceptance. This deposit is not returnable, but is applied upon the fees of the first quarter.

A deposit to cover breakage or loss of apparatus and materials may be required in any department, such deposits being returnable, less charge for breakage, loss, or wear and tear of apparatus. Students taking the fifth and sixth quarters in Medicine at San Francisco will be required to pay a deposit of $3 at the Business Office of Lane Hospital to cover breakage, or loss of apparatus of the Department of Pharmacology. The total deposits for this purpose may vary from $10 to $20 per annum. Drafts and checks should be drawn for the exact amount to the order of Stanford University School of Medicine, as no change can be returned to students on checks or drafts.

ANATOMY

Arthur William Meyer, Charles Haskell Danforth, Frank Mace McFarland, Professors
Clara S. Stoltenberg, Associate Professor
Maurice Sheehan, Instructor
Herlwyn R. Green, Acting Instructor

[For outline of courses see under Anatomy, pp. 172–174.]

BACTERIOLOGY AND EXPERIMENTAL PATHOLOGY

Edwin William Schultz, Wilfred Hamilton Manwaring, Professors
Claus W. Jungeblut, Associate Professor
Albert Paul Krueger, Instructor

[For outline of courses see under Bacteriology and Experimental Pathology, pp. 175–177.]

CHEMISTRY

Robert Eckles Swain, Professor
James Murray Luck, Assistant Professor

Biochemistry.—Lectures. (See Courses 141 and 143, Department of Chemistry.)

Biochemistry.—Laboratory. (See Chemistry 142 and 144.)

[Students enrolled as medical students will be required to deposit $7.50 breakage fee for Courses 142 and 144; other University students will pay the usual fee of $15.00.]

MEDICINE

Charles Miner Cooper, Clinical Professor Emeritus

Arthur Leonard Bloomfield (Executive), †Thomas Addis, George de Forest Barnett, W. Edward Chamberlain (Radiology), Henry George Mehrtens (Neuro-psychiatry), Professors

Harry Leslie Langnecker, Associate Professor

Harry Everett Alderson, William Fitch Cheney, William R. P. Clark, Harold Phillips Hill, Walter Frank Schaller, Clinical Professors

Robert Reid Newell, Harry Alphonso Wyckoff, Associate Professors

Walter Whitney Boardman, Thomas George Inman, Philip Hale Pierson, Jay Marion Read, Julian Wolfsohn, Associate Clinical Professors

William Dock, Assistant Professor

Joseph Henry Catton, James Arthur Cutting, Norbert J. Gottbrath, Samuel H. Hurwitz, Arthur Aloysius O'Neill, John M. Rehfisch, Stuart C. Way, Assistant Clinical Professors

John Kent Lewis, Eaton Macleod MacKay, Helen Marshall, Instructors

Donald Carson, Garnett Cheney, †Isabella Clinton, Joseph Charles Cuneo, Leo H. Garland, Willard E. Kay, Thomas Henshaw Kelly, William Kenney, Allen Kramer Krause, Arthur Carol McKenney, Jr., Merlin T. R. Maynard, Laird M. Morris, Walter Schilling, Dwight Emerson Shepardson, Julius Sherman, Edward F. Stadtherr, Pleasant A. Taylor, Clinical Instructors

William George Burkhard, David Kiong Chang, Monica Donovan, John L. Fanning, Charles D. Fletcher, Alexander F. Fraser, †Mark Lewis Gerstle, Jr., Charles Dudley Gwinn, Bernard Kaufman, Roger Bain McKenzie, Ruth Nethercut, William Wise Newman, Elwood R. Olsen, Pearl Sylva Pouppirt, Esteban Reyes, Ralph Arthur Reynolds, Martin J. Seid, Beverly Simpson, Emile David Torre, Assistants

Charles Gurchot, Donald Carlyon Marshall, Frances Rhodes Watson, Assistants in Research (Neurology and Pharmacology)

Howell Lovell, Lecturer on Legal Medicine

Lambert B. Coblentz, Edward Matzger, Assistant Lecturers

John Lockhart Campbell, Clinic Dentist

DIVISIONS

Neuropsychiatry	Radiology	Cutaneous Medicine and Syphilis
Physiotherapy	Tuberculosis	

Instruction in the Department of Medicine normally commences in the fifth quarter of medical registration, at which time the courses in Physical Diagnosis and Clinical Pathology are started. These courses are prerequisite for most other courses in this department.

Before beginning the interne year, students are required: (1) to have

† Absent on leave, 1928–29.

completed the prescribed courses, and (2) to have passed a final examination in Internal Medicine, Neurology, and Cutaneous Medicine.

Deviations from this general plan of work will be permitted only after obtaining permission of the instructors involved and of the Executive Head of the Department of Medicine.

COURSES FOR SECOND-YEAR STUDENTS

201. Introduction to Clinical Medicine.—Preliminary demonstrations and practice in the methods of physical diagnosis followed by bedside work in which abnormal physical findings are correlated with symptoms and laboratory data.

6 hours (120 hours), winter and spring quarters (BARNETT) (San Francisco Hospital) TThS 8:30–10:30
Winter, 43; spring, 43

202. Clinical Pathology.—Lectures and laboratory work. The usual methods of examining the urine, blood, sputum, gastric contents, feces, and cerebro-spinal fluid are carried out by the student and the significance of abnormalities is noted.

4 hours (80 hours), winter and spring quarters (WYCKOFF)
(winter) (Room 312b) W 9:30–11:30, F 10:30–12:30
(spring) WF 9:30–11:30
Winter, 43; spring, 43

203. Radiology.—Section work: Lane Hospital.

2 hours (20 hours), winter quarter (CHAMBERLAIN, NEWELL) TF 4–5
Winter, 43

COURSES FOR THIRD-YEAR STUDENTS

The third-year class is divided into two sections, each of which is assigned for sixteen weeks to Lane Hospital and to the San Francisco Hospital.

Each section is subdivided into two sub-sections and assigned for eight weeks each to the Department of Medicine and to the Departments of Surgery and Gynecology and Obstetrics.

The students assigned to Medicine at Lane Hospital and at San Francisco Hospital do bedside work in general Medicine and Neurology.

During the assignment to the San Francisco Hospital, students attend clinics on tuberculosis and other communicable diseases.

204. Ward Work in General Medicine: Lane Hospital.

9 hours (72 hours) (BLOOMFIELD, CHENEY, and STAFF) MTWThFS mornings
First semester, 25; second semester, 24

205. Ward Work in General Medicine: San Francisco Hospital.

16 hours (128 hours) (BARNETT and STAFF) MTWThF 8:30
First semester, 24; second semester, 25

206. Set Clinic in Medicine: Lane Hospital.

1 hour (16 hours), third year
1 hour (32 hours), fourth year (BLOOMFIELD) (Lane Hall) T 11:30–12:30
First semester, 68; second semester, 67

207. Set Clinic in General Medicine: San Francisco Hospital.

1½ hours (24 hours) (HILL) F 11–12:30
First semester, 24; second semester, 25

208. Neurology.—Ward work: Lane Hospital.

9 hours (36 hours) (INMAN, SCHALLER) MTWThFS mornings
First semester, 25; second semester, 24

209. Neurology.—Clinic: San Francisco Hospital.

1 hour (8 hours) (WOLFSOHN) Th 11:30–12:30
First semester, 24; second semester, 25

210. Tuberculosis Clinic: San Francisco Hospital.
1 hour (8 hours) (CLARK) (one-half of the class) S 9–11
First semester, 24; second semester, 25

211. Communicable Diseases Clinic: San Francisco Hospital.
1 hour (8 hours) (O'NEILL) (one-half of the class) S 9–11
First semester, 24; second semester, 25

212. Clinical-Radiological Conference: Lane Hospital.
1 hour (16 hours), third year
1 hour (32 hours), fourth year (CHAMBERLAIN, BLOOMFIELD, and STAFFS) (Lane Hall) M 11:30–12:30
First semester, 68; second semester, 67

213. Out-Patient Clinic, Minor Medicine, and Surgery.
1 hour (16 hours), third year
1 hour (32 hours), fourth year (Lane Hall) S 11:30–12:30
First semester, 68; second semester, 67

214. Clinical Demonstrations of Special Topics in Internal Medicine.
1 hour (16 hours) (BLOOMFIELD and STAFF) (Lane Hall) W 11:30–12:30
First semester, 25; second semester, 24

COURSES FOR FOURTH-YEAR STUDENTS

All of the work of the fourth year is given at Lane Hospital and the School of Medicine. For work in the Out-Patient Department the class is divided into eight sections which are assigned in rotation to the various clinics. During the time assigned to the Department of Medicine, students work in General Medicine, Neurology, and Dermatology and Syphilis.

All students of the fourth year are required to attend Courses 206, 212, and 213.

215. Out-Patient Department, General Medicine.
12 hours (96 hours) MTWThFS 9:30–11:30
First semester (96 hours) 16; (48 hours) 10
Second semester (96 hours) 17; (48 hours) 10

216. Out-Patient Department, Neurology.
12 hours (48 hours) MTWThFS 9:30–11:30
First semester, 23; second semester, 20

217. Out-Patient Department, Dermatology and Syphilis.
12 hours (48 hours) (ALDERSON and STAFF) MTWThFS 9:30–11:30
First semester, 20; second semester, 23

218. Psychiatry.—Lectures and Clinics.
2 hours (40 hours), autumn and winter quarters (Lane Hall) M 1:30–3:30
1 hour (10 hours), spring quarter M 1:30–2:30
(MEHRTENS, CUTTING)
Autumn, 43; winter, 43; spring, 43

219. History of Medicine.—In association with other departments.
1 hour (10 hours), spring quarter (Lane Library) M 3:30–4:30
Spring, 43

220. Physical Therapeutics.—Lectures and demonstrations. Given in sections of one-third of the class.
1 hour (10 hours) (LANGNECKER) M 2:30–3:30, WF 1:30–2:30
Spring, 43

221. Legal Medicine.
1 hour (10 hours), spring quarter [Not given in 1928–29]

ELECTIVE COURSES

1. Ward Rounds in Medicine.—For fourth-year students only. Limited to twelve students.
3 hours (30 hours) 8:30–9:30 **By arrangement**
First semester, 30; second semester, 30

2. Ward Rounds in Neurology.—For fourth-year students only. Limited to six students.
3 hours (30 hours) 8:30–9:30 By arrangement
First semester, 30; second semester, 30

3. Mental Rating in Neuropsychiatry.—Limited to four students.
1 hour (10 hours) (Marshall) By arrangement

4. Diseases of the Endocrine Glands.—Clinics and recitations.
Spring quarter (Kay) By arrangement
Spring, 16

5. Radiology.—Special work in consultation with the division of Radiology. Either therapy or diagnosis may be followed.
(Chamberlain, Newell) By arrangement
Autumn, 25; winter, 25; spring, 25

6. Roentgenoscopy.—Experience in the actual use of the fluoroscope. Limited to two students per section.
(Chamberlain, Newell) By arrangement
Autumn, 25; winter, 25; spring, 25

7. Brights Disease and Diabetes.—Diagnosis and treatment. Clinics and laboratory work. During summer quarter only.
(Addis, Shepardson) By arrangement

8. Dentistry for Medical Students.—Five lectures covering the anatomy and pathology of the teeth, treatment of caries, dental surgery, prosthetic dentistry, orthodontia, and preventive dentistry. For third- and fourth-year students.
Spring quarter (Campbell) By arrangement

OBSTETRICS AND GYNECOLOGY

Alfred Baker Spalding, Professor
C. Frederic Fluhmann, Associate Professor
Ludwig Augustus Emge, Karl Ludwig Schaupp, Henry Augustus Stephenson, William Emerson Stevens, Associate Clinical Professors
Hans vonGeldern, Albert Victor Pettit, Assistant Clinical Professors
Robert Glenn Craig, Lewis Michelson, Clinical Instructors
Donald Alexander Dallas, Joel H. Hanson, William Catt Hobdy, Chester B. Moore, Assistants

REQUIRED COURSES FOR SECOND-YEAR STUDENTS

201. Obstetrics, Histology.—Lecture one hour, laboratory one hour a week.
2 hours (20 hours), winter quarter (vonGeldern) (Room 506) F 8:30–10:30
Winter, 46

202. Obstetrics.—Normal pregnancy, labor and puerperium.
2 hours (20 hours), winter quarter (Fluhmann) (Room 506) M 9:30–10:30
W 8:30–9:30
Winter, 43

203. Gynecology.—Lectures.
2 hours (20 hours), spring quarter (Emge) (Room 506) WF 8:30–9:30
Spring, 43

REQUIRED COURSES FOR THIRD-YEAR STUDENTS

204. Obstetrics.—Abnormal pregnancy, labor and puerperium, and obstetrical operations.
1 hour (31 hours), autumn, winter, and spring quarters (SPALDING)
(Room 515) autumn, M 2:30–3:30; winter and spring, M 3:30–4:30
Autumn, 49; winter, 49; spring, 49

205. Ward Rounds: Lane Hospital.—Obstetrics and gynecology.
2 hours (16 hours), autumn, winter, and spring quarters
(CRAIG, STEPHENSON) TS 8:30-9:30
First semester, 25; second semester, 24

206. Ward Rounds: San Francisco Hospital.—Obstetrics and gynecology.
1 hour (8 hours), autumn, winter, and spring quarters
(autumn and winter, SCHAUPP, VON GELDERN; spring, EMGE, PETTIT)
F 8:30–9:30
First semester, 24; second semester, 25

207. Ward Work: Lane Hospital.—Gynecology.
2 hours (27 hours), autumn, winter, and spring quarters (INTERNE)
Daily 9:30–11:30
First semester, 25; second semester, 24

208. Ward Work: San Francisco Hospital.—Gynecology.
2 hours (27 hours), autumn, winter, and spring quarters (HOUSE OFFICER)
Daily 9:30–11:30
First semester, 24; second semester, 25

209. Attendance on Deliveries.—Each student is required to witness ten deliveries either in Lane Hospital or San Francisco Hospital.
1 hour (10 hours), autumn, winter, and spring quarters (JUNIOR INTERNE)

REQUIRED COURSES FOR FOURTH-YEAR STUDENTS

210. Manikin Exercises.—One-half of class on Wednesday, other half on Friday.
1 hour (10 hours), autumn quarter (vonGELDERN, PETTIT)
(Room 506) WF 1:30–2:30
Autumn, 43

211. Women's Clinic.—Obstetrics, gynecology and urology in women.
2 hours (48 hours), autumn, winter, and spring quarters (SPALDING and STAFF)
Daily 9:30–11:30
First semester, 22; second semester, 21

ELECTIVE COURSES

212. Gynecology, Pathology.—Laboratory two hours a week. Seniors.
2 hours (20 hours), spring quarter (FLUHMANN) (Room 405) W 3:30–5:30
Spring, 8

213. Prenatal Clinic.—Limited to four students for periods of one month. Seniors.
2 hours (8 hours), autumn, winter, and spring quarters (RESIDENT) W 1:30–3:30

214. Out-Patient Obstetrics.—For periods of ten days, students electing this course will be excused from other class duties while attending the delivery of patients in their homes. Seniors.
(70 hours), autumn, winter, and spring quarters (DALLAS)

PATHOLOGY

William Ophüls, Jean Redman Oliver, Professors
Edward Merchant Butt, Student Assistant
Eshref Shevky, Assistant in Research

The following courses in Pathology are required of medical students: Pathology 201, two quarters; Pathology 203, three quarters; Pathology 204, three quarters.

COURSE FOR SECOND-YEAR STUDENTS

201. General Pathology.—A course of lectures, demonstrations, and laboratory work which covers disturbances in circulation, regressive and progressive tissue changes, inflammation, granulomata, and tumors. The study of human material is supplemented by experiments. Two lectures of 1 hour and two laboratory periods of 2½ hours each per week in the winter quarter, and one lecture of 1 hour and two laboratory periods of 2½ hours each week in the spring quarter. Prerequisites: Histology, Bacteriology.

7 hours (70 hours), winter quarter
6 hours (60 hours), spring quarter (Ophüls, Oliver, Butt)
(Room 405) (winter) M 8:30–9:30, S 11:30–12:30, MF 1:30–4
(spring) M 8:30–9:30, MF 1:30–4

Winter, 43; spring, 43

COURSE FOR THIRD-YEAR STUDENTS

203. Special Pathology.—A course of demonstrations of fresh and preserved gross and microscopical specimens, illustrating selected chapters of Human Pathology. Part of the time is devoted to the technic of postmortem examinations. Diagnostic work is done in the spring quarter. Prerequisite: General Pathology.

4 hours (124 hours), autumn, winter, and spring quarters (Ophüls, Oliver)
(Morgue, Lane Hospital) W 2:30–4:30; (Room 405) T 3:30–4:30, Th 2:30–3:30

Autumn, 49; winter, 49; spring, 49

COURSES FOR FOURTH-YEAR STUDENTS

204. Clinico-Pathological Demonstrations.—Three quarters required. During the summer quarter this is given by request.

1 hour (31 hours), autumn, winter, and spring quarters (Oliver)
(Morgue, Lane Hospital) W 11:30–12:30

First semester, 43; second semester, 43

205. Research Work in the Pathological Laboratory.—Students wishing to do special work in the Pathological Laboratory should have finished Course 201. They should consult with the Executive of the Department in regard to the selection of a proper subject for investigation. As the laboratory accommodations are limited, students must do a reasonable amount of work, otherwise the privilege will be withdrawn. A deposit of $10 will be required to cover such material as is used by the student in the course of his work. Such part of this as is not drawn against will be refunded on the completion of the work undertaken. Work may be undertaken during any of the four quarters. The same regulations apply to work on theses or for advanced degrees in the department, except that in the latter case the students also should have finished Course 203.

During the summer quarter a special effort will be made to accommodate properly prepared undergraduates or graduates who wish to do experimental work in Pathology.

(Ophüls, Oliver)

PEDIATRICS

HAROLD KNIEST FABER, Professor
†HERBERT HENRY YERINGTON, Associate Clinical Professor
LLOYD BLACKWELL DICKEY, Assistant Professor
MARY H. LAYMAN, ROLAND P. SEITZ, Assistant Clinical Professors
RALEIGH W. BURLINGAME, JOHN J. KINGSTON, JAMES CLIFFORD PARROTT, Clinical Instructors
RUTH GARLAND BOWES, MARGARET ESTELLE CARLSMITH, FANNIE HADDEN, EILEEN M. LEONARD, Assistants
ADELAIDE BROWN, GEORGE D. LYMAN, Lecturers

COURSES FOR THIRD-YEAR STUDENTS

The third-year class will be divided into four sections assigned to bedside work in the Children's Wards of Lane Hospital, each for a period of eight weeks. By arrangement with the Department of Medicine students will divide their time according to assignment of patients between the Medical Wards and the Children's Wards.

201. Ward Work in Pediatrics: Lane Hospital.
9 hours (36 hours) (FABER, DICKEY, LAYMAN, SEITZ)
(Ward rounds T 9:30–10:30, F 8:30–9:30) MTWThFS mornings
First semester, 25; second semester, 24

202. Set Clinic in Pediatrics: Lane Hall.
1 hour (16 hours), third year
2 hours (32 hours), fourth year (FABER, DICKEY, LAYMAN) Th 11:30–12:30
First semester, 68; second semester, 67

COURSES FOR FOURTH-YEAR STUDENTS

203. Lectures in Child Welfare.
1 hour (10 hours), autumn quarter (BROWN) (Room 311) Th 8:30–9:30
Autumn, 43

204. Out-Patient Department, Pediatrics.
12 hours (48 hours) (DICKEY, LAYMAN, PARROTT, BURLINGAME)
MTWThFS 9:30–11:30
First semester, 22; second, 21

Students will be assigned to Pediatrics in sections, each for four weeks. One-half of each section will be assigned for one-half of the period to work at the Isolation Hospital.

ELECTIVE COURSES FOR FOURTH-YEAR STUDENTS

1. Ward Rounds in Pediatrics.—Limited to 12 students.
1 hour (10 hours) (FABER, DICKEY, LAYMAN, SEITZ) S 8:30–9:30
First semester, 12; second semester, 12

2. Lectures on Communicable Diseases in Children.
1 hour (10 hours), spring quarter By arrangement

3. Lectures on Child Psychology, Normal and Abnormal.
1 hour (10 hours), winter quarter (LAYMAN) [Not given in 1928–29]

† Absent on leave, 1928–29.

PHARMACOLOGY AND THERAPEUTICS

Paul J. Hanzlik, Professor
Maurice L. Tainter, Assistant Professor
William Dock, Russel van Arsdale Lee, Assistant Clinical Professors
Charles Christian Johnson, Instructor
David Alvra Wood, Assistant in Research and Instruction
Charles Gurchot, Donald Carlyon Marshall, Jean Benedict Spaulding, Frances Rhodes Watson, Assistants in Research (Neurology and Pharmacology)
Frederick Proescher, Lecturer in Therapeutics

REQUIRED COURSES FOR SECOND-YEAR STUDENTS

201. Chemical Pharmacology.—The course treats of the physical and chemical aspects of drug actions, including exercises on typical pharmaceutical preparations, principles of prescription writing, general toxicology, etc. The work consists of demonstrations, class practice, and conferences.

Didactic, 16 hours; laboratory, 32 hours; total 48 hours; given during the first 8 weeks of the winter quarter (Tainter, Johnson) Didactic MW 11:30–12:30, Lab. TTh 1:30–3:30
Winter, 43

202. Experimental Pharmacodynamics.—This course consists of demonstration and class experiments with living tissues and animals and illustrates the actions of drugs and methods of experimental analysis. Nearly one-half of the periods is devoted to demonstrations by the instructors and the remainder is given to class practice and to discussion of the results in conferences. The work of Courses 201 and 202 forms the basis of other courses in the department.

Conferences, 24 hours; laboratory and demonstration, 48 hours; total 72 hours; given during the last 2 weeks of the winter and all of the spring quarters (Hanzlik, Tainter, Johnson) Conferences MW 11:30–12:30, Lab. TTh 1:30–3:30
Spring, 43

203. Systematic Pharmacology.—The course covers locally acting drugs.

Recitation 10 hours, spring quarter (Tainter) F 11:30–12:30
Spring, 43

REQUIRED COURSES FOR THIRD-YEAR STUDENTS

204. Systematic Pharmacology.—In this course the systemic actions, including the experimental basis, toxicity and clinical actions, uses, and doses of the more important drugs are considered. Instruction is given by lectures and conferences.

60 hours, autumn and winter quarters (Hanzlik) (autumn) MWF 1:30–2:30
Autumn, 46; winter, 46 (winter) MWF 2:30–3:30

205. General Therapeutics.—This course attempts a systematic presentation of the indications for and uses of drugs and other agents in the treatment of disease, and consists of lectures, conferences, and prescription writing practice.

33 hours, spring quarter (Dock) MWF 2:30–3:30
Spring, 49

ELECTIVE COURSES

206. Research in Pharmacology and Therapeutics.—Open throughout the year to students for thesis and to graduates with proper qualifications

and special interest in these subjects. Work may be done independently or under supervision in the department. For students not less than four hours per week.

(Staff) By appointment

Autumn, 2; winter, 2; spring, 2

207. Clinical Therapeutic Conference.—One hour weekly throughout the year for third- and fourth-year students. The work consists of conferences on therapeutic methods and results at the bedside; given in the wards of San Francisco Hospital. Limited to six students.

(Lee) Wednesday

PHYSIOLOGY

Oliver Peebles Jenkins, Professor Emeritus

Ernest Gale Martin, Professor

James Percy Baumberger, James Rollin Slonaker, Frank Walter Weymouth, Associate Professors

George Daniel Shafer, Assistant Professor

John Field II, Victor Ernest Hall, Douglas Merritt Whitaker, Instructors

[See Courses 103, 104, 105, and 207 outlined on pp. 192–193.]

PUBLIC HEALTH AND PREVENTIVE MEDICINE

Ernest Charles Dickson (Executive), Professor

§Richard Godfrey Brodrick, Professor of Hospital and Health Administration

George Dock (Special Lecturer in Tropical Diseases), Leon Benedict Reynolds (Professor of Hydraulic and Sanitary Engineering, Stanford University, Special Lecturer in Sanitation), Morton Raymond Gibbons (Industrial Medicine and Life Insurance), Herbert Gunn (Tropical Medicine), Harry Reeves Oliver (Military Hygiene), William Peacey Shepard (Industrial Hygiene), Carl Otto Eduard Werner (Tropical Medicine), Harry Alphonso Wyckoff (Tropical Medicine), Lecturers

Harold DeLos Chope, Assistant in Instruction

C. Emelia Peterson, Research Assistant

Nina Alexander Chern, Gail Sweney Reeves, Assistant Bacteriologists

201. The Principles of Public Health and Preventive Medicine.—A lecture course of 60 hours which includes discussion of the various problems of public health and preventive medicine. The lectures are given by members of the teaching staff and by others who are actively interested in various aspects of public-health work.

2 hours (60 hours), fifth, sixth, and seventh quarters (Dickson and Others)
(Room 311) Fifth and sixth quarters, MTh 4–5
Seventh quarter, M 3:30–4:30, Th 2:30–3:30

Autumn, 49; winter, 43; spring, 43

§ Deceased, May 2, 1929.

202. Industrial Medicine and Life Insurance.—A lecture course of ten hours dealing with the relation of medicine and surgery to industrial accidents, the State Compensation Law, and the medical aspects of life insurance.
1 hour (10 hours), twelfth quarter (GIBBONS) [Not given in 1928–29]

203. Parasitology.—A laboratory course in which the student has an opportunity to study the usual parasites which are encountered in medical practice.
2 hours (20 hours), eleventh quarter (WYCKOFF) (Room 312b) F 8:30–9:30
Winter, 43

204. Tropical Medicine.—A course of lectures and discussions dealing especially with those tropical diseases which occur in the United States and emphasizing the common methods of spread and of mass control.
2 hours (20 hours), eighth quarter (———) [Not given in 1928–29]

205. Sanitary Survey.—Each student is required to make a sanitary survey of a municipality or industrial plant, an epidemiological investigation of an outbreak of communicable disease, or a report on some other problem of public-health control, and to present the report before the beginning of the tenth quarter. The problem to be investigated should be selected by the student but *must be approved* by the executive of the department.

ELECTIVE COURSES

206. Demonstrations and Conferences.—A laboratory and practical course which includes discussions and demonstrations of the problems of laboratory diagnosis of infectious diseases, vaccinations, serum therapy, epidemiology, etc.
(DICKSON) By arrangement

207. Serology.—A laboratory course in which the student becomes familiar with the methods of preparing and standardizing antigens, amboceptors, etc., and with the technic of complement fixation tests (Wassermann test) and agglutination tests. Limited to six students.
2 hours (20 hours), fourth year, spring quarter (WYCKOFF)
(Room 312b) F 2:30–4:30

SURGERY

Adolph Barkan, Frank Ellsworth Blaisdell, Stanley Stillman, Professors Emeritus

Albert Brown McKee, Rufus Lee Rigdon, Clinical Professors Emeritus

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Emile Frederic Holman (Executive), Leonard W. Ely, Emmet Rixford, Professors

Hans Barkan, §John Francis Cowan, Leo Eloesser, Philip Kingsnorth Gilman, Edward Cecil Sewall, Clinical Professors

Frederick Leet Reichert, Associate Professor

John Adolph Bacher, James Root Dillon, Arthur Lawrence Fisher, Harrington Bidwell Graham, Harvard Young McNaught, Caroline B. Palmer, Edward B. Towne, Associate Clinical Professors

John Robert Burrows, Edmund Butler, Harold Augustus Fletcher, Sylvan L. Haas, Wilber Frank Swett, Assistant Clinical Professors

Rea Ernest Ashley, Otto Barkan, Loren R. Chandler, Sigurd von Christierson, Albert D. Davis, George Newton Hosford, Henry A. R. Kreutzmann, †J. Minton Meherin, Merrill C. Mensor, Gunther Nagel, Roy Frank Nelson, Robert A. Ostroff, Dohrmann K. Pischel, Aubrey Gatliff Rawlins, Lorruli Anna Rethwilm, Lloyd Robinson Reynolds, Frank H. Rodin, William Lister Rogers, Chester Howard Woolsey, Clinical Instructors

Paul Bailey, Rudolph Ludwig Dresel, Russell Fletcher, Carl Gans, Curtis B. Gorham, Gordon F. Helsley, James Gordon Henderson, Nelson Howard, Robert Steele Irvine, David E. Matzke, Mary E. Mathes, Edmund J. Morrissey, Millard R. Ottinger, Paul T. Pace, Clarence C. Porter, Robert Scarborough, Herbert Gordon Smith, Rulon Squire Tillotson, Alvin P. Wold, Assistants

Frank R. Girard, George Washington Hartman, Henry Anthon Lewis Ryfkogel, Lecturers

Ferd Walter Callison, Hiram B. Duncan, Samuel A. Goldman, Assistant Lecturers

DIVISIONS

Ophthalmology
Genito-Urinary Diseases
Orthopedic Surgery
Otology, Rhinology, and Laryngology

GENERAL PLAN OF INSTRUCTION

Instruction in Surgery begins in the fifth quarter of the second year with recitations and discussions on assigned reading in a standard textbook. This course is intended to acquaint the student with the principles of surgery. Elementary instruction in the physical diagnosis of surgical conditions is

§ Deceased, May 16, 1929.

† Absent on leave, 1928–29.

included in the course given by the Department of Medicine. Two lectures on anaesthesia are included in the course.

The laboratory course in the second year includes demonstrations of methods of sterilization of surgical supplies. It includes also operations in which surgical procedures are performed on living animals under complete ether anaesthesia, and under exactly the same conditions that prevail in the modern operating room, particular attention being paid to asepsis, hemostasis, and the healing of wounds. Demonstrations and practice in the use of bandages, plaster, and surgical appliances are provided. The laboratory course in fractures and dislocations includes a study of X-ray plates and the production of the more important fractures and dislocations on a cadaver with immediate examination by dissection.

In the third year the students serve in the surgical wards of the Lane and San Francisco Hospitals as clinical clerks for a period of eight weeks in each hospital. The student is an integral member of the surgical house staff, spending his time each morning from 8:30 to 11:30 on the wards and in the operating rooms. Ward rounds are held daily at 8:30 covering the fields of general surgery, orthopedics, urology, and gynecology. The patients entering the hospital on these services are assigned to the student in rotation, and the student is held responsible for a complete history, and a complete physical examination under the supervision of the interne, and for the routine laboratory work such as urinalysis, blood, sputum, and feces analysis. The student is responsible for the presentation of his cases at clinics, conferences, and ward rounds, and must be primed in collateral reading for a full discussion of the case at these meetings. The student assists at the operations on his patients and follows closely the post-operative care of the patient. He is held responsible for a description of the macroscopic and microscopic appearance of whatever pathological material is obtained. During this period the student gives anaesthesia under supervision to ten cases.

Before entering upon his work in the ward the student is expected to provide himself with a certain minimum equipment which will enable him to make complete examinations of all patients under his care, so that he may thoroughly acquaint himself with the normal tissues before encountering the abnormal. This equipment includes the following: stethoscope, percussion hammer, tape measure, skin pencil, haemacytometer, nasal speculum, laryngeal mirror, ophthalmoscope, otoscope, head-mirror, haemometer, sphygmomanometer, and a thermometer. This equipment represents the instruments that every practitioner should have when he begins the practice of medicine, and it is to his advantage to learn their use while a student.

Amphitheater clinics are held once weekly at the San Francisco Hospital, attended by one-half the third-year class, and once weekly at the Lane Hospital, attended by the other half of the third-year class and by all the fourth-year class. Patients are presented so as to illustrate, in the course of the year, most of the surgical diseases of the different regions of the body.

In the fourth year the student is assigned to work in the various clinics of the Out-Patient Department. Under the supervision of instructors, he examines and helps care for the patients in the surgical, orthopedic, urological, otolargyngological, and ophthalmological dispensaries. An attempt is made in some of the clinics to duplicate individual office practice.

During the fourth year certain elective courses are open to a limited number of students who are particularly interested in the field of surgery, and in the laboratory investigation of surgical problems.

During one-half the third year and during all the fourth year, the student attends once weekly the out-patient amphitheater clinic. At this clinic patients from the several out-patient clinics are presented who illustrate the common or minor ailments which are not diagnostic problems, which do not require hospital care, and which can be disposed of by dispensary treatment. In this way it is hoped to acquaint the student with a fair knowledge of how to care for the numerous minor ailments which he will encounter immediately upon his entrance into practice.

REQUIRED COURSES FOR SECOND-YEAR STUDENTS

201. Introduction to Surgery.—Recitations and discussions on assigned reading.
2 hours (40 hours), winter and spring quarters (Holman, Reichert, Palmer) (Room 506 and Surgical Clinic) TTh 11:30–12:30
Winter, 43; spring, 43

202. Fractures and Dislocations.
3 hours (30 hours), winter and spring quarters (Ely, Howard) (Room 506 and Orthopedic Clinic) One-half the class on alternate Wednesdays 1:30–4:30
Winter, 43; spring, 43

203. Laboratory Course.—Demonstrations and practice in bandaging, splinting, dressing of wounds, hypodermoclysis, venesection, etc.
3 hours (15 hours), winter and spring quarters (Gans) (Surgical Amphitheater) One-fourth the class on alternate Wednesdays 1:30–4:30
Winter, 43; spring, 43

204. Operative Surgery.—Students serve in succession as anaesthetist, surgeon, first assistant, second assistant, nurse.
3 hours (15 hours), winter and spring quarters (Reichert) (Surgical Laboratory) One-fourth the class on alternate Wednesdays 1:30–4:30
Winter, 43; spring, 43

205. Orthopedic Surgery.—Lectures and demonstrations.
1 hour (10 hours), spring quarter (Ely) (Lane Hall) M 10:30–11:30
Spring, 43

REQUIRED COURSES FOR THIRD-YEAR STUDENTS

For purposes of morning instruction the third-year class is divided into four sections, A, B, C, and D, each section spending eight weeks on each of the following services: (*a*) Lane Hospital Medicine, (*b*) Lane Hospital Surgery, (*c*) San Francisco Hospital Medicine, (*d*) San Francisco Hospital Surgery.

206. Ward Rounds and Ward Work: Lane Hospital.
104 hours (gynecology, 40 hours) for 8 weeks
(Holman, Ely, Reichert, Dillon, Palmer, and Staff) Daily 8:30–11:30
First semester, 25; second semester, 24

207. Ward Rounds and Ward Work: San Francisco Hospital.
90 hours (gynecology, 30 hours) for 8 weeks
(Rixford, Eloesser, Towne, Butler, Dillon, and Staff) Daily 8:30–11:30
First semester, 24; second semester, 25

208. Operating Clinic: San Francisco Hospital.—One-half the class.
1½ hours (24 hours) (Rixford) Th 8:30–10
First semester, 24; second semester, 25

209. Clinic on Hospital Patients.—One-half the class.
1 hour (16 hours) (Holman, Ely, Reichert, Dillon) (Lane Hospital, Surgical Amphitheater) F 11:30–12:30
First semester, 25; second semester, 24

210. General Surgical Pathology and Diagnosis.—Current material will be utilized as much as possible.
1 hour (31 hours), autumn, winter, and spring quarters (NAGEL) (Room 506) T 3:30–4:30
Autumn, 49; winter, 49; spring, 49

211. Clinic on Patients from All Dispensaries.—One-half the class.
1 hour weekly throughout the year (CHANDLER, NAGEL in Surgery) (Lane Hall) S 11:30–12:30
First semester, 25; second semester, 24

REQUIRED COURSES FOR FOURTH-YEAR STUDENTS

For purposes of dispensary instruction, the fourth-year class is divided into eight sections of about six students each. These sections serve daily in the following dispensary clinics: General Medicine, 8 weeks; General Surgery, 4 weeks; Gynecology and Obstetrics, 4 weeks; Pediatrics, 4 weeks; Neurology, 4 weeks; Orthopedics, 2 weeks; Dermatology, 4 weeks; Urology, 2 weeks; Ophthalmology, 4 weeks; Otology, 4 weeks.

209. Clinic on Hospital Patients.
1 hour weekly throughout the year (31 hours) (HOLMAN, ELY, REICHERT, DILLON) (Surgical Amphitheater) F 11:30–12:30
First semester, 43; second semester, 43

211. Clinic on Dispensary Patients from All Dispensaries.
1 hour weekly throughout the year (COWAN in Surgery) (Lane Hall) S 11:30–12:30
First semester, 43; second semester, 43

212. Urology.—Lectures.
1 hour (10 hours), autumn quarter (DILLON) (Room 311) T 8:30–9:30

213. Surgical Dispensary.
2 hours (48 hours) for 4 weeks (COWAN, GILMAN, REICHERT, CHANDLER, and STAFF) Daily 9:30–11:30
First semester, 21; second semester, 22

214. Orthopedic Dispensary.
2 hours (24 hours) for 2 weeks (ELY, FISHER, and STAFF) Daily 9:30–11:30
First semester, 22; second semester, 21

215. Urological Dispensary.
2 hours (24 hours) for 4 weeks (DILLON, KREUTZMANN, HENDERSON, and STAFF) Daily 9:30–11:30
First semester, 21; second semester, 22

216. Ophthalmology.
Lecture 1 hour (31 hours), autumn, winter, and spring quarters (BARKAN) (Lane Hall) T 1:30–2:30
Autumn, 43; winter, 43; spring, 43

Out-Patient Instruction.—2 hours except Monday and Saturday.
32 hours for 4 weeks (SWETT, RODIN, and STAFF) (Dispensary) TWThF 2:30–4:30
First semester, 19; second semester, 21

217. Otology, Rhinology, and Laryngology.
Lecture 1 hour (31 hours), autumn, winter, and spring quarters (SEWALL) (Lane Hall) Th 1:30–2:30
Autumn, 43; winter, 43; spring, 43

Out-Patient Instruction.—2 hours except Monday and Saturday.
32 hours for 4 weeks (BACHER, MCNAUGHT, and STAFF) (Dispensary) TWThF 2:30–4:30
First semester, 20; second semester, 20

ELECTIVE COURSES

218. Surgical Anatomy.
1 hour (10 hours), autumn, winter, and spring quarters (HOWARD) (Anatomical Amphitheater) Th 3:30–4:30
Autumn, 10; winter, 10; spring, 10

219. Surgical Ward Rounds.—Limited to 15 students.
5 hours (20 or 40 hours) for 4 or 8 weeks (Lane Hospital) Daily 8:30–9:30
First semester, 30; second semester, 30

220. Research Laboratory.—Limited to two students at a time.
(20 or 40 hours) for 4 or 8 weeks (HOLMAN, REICHERT) By arrangement

221. Emergency Surgery.—Limited to six students. The student is assigned to one of the emergency hospitals for duty during certain hours of the day. He assists the resident medical officer in caring for patients admitted for treatment. This includes instruction in minor as well as major emergency procedures, more particularly fractures.
2 hours (40 or 80 hours) for 4 or 8 weeks (BUTLER) Daily in afternoon

222. Anaesthesia.—Limited to two students at a time.
(20 or 40 hours) for 4 or 8 weeks (PALMER) By arrangement
Autumn, 1; spring, 2

223. Special Dispensary Work.—This work may be undertaken in any one of the surgical specialties including otolaryngology, ophthalmology, urology, and orthopedics.
Hours to be arranged

224. Library Walks.—An association with the old masters as obtained by a review of original works in the Lane Historical Library.
1 hour (10 hours) (REICHERT) T 4:30–5:30

PRE-NURSING CURRICULUM

The Pre-Nursing Curriculum is designed primarily for those who wish to prepare themselves for administrative, teaching, social service, or public-health work. The curriculum consists of three years' work at Stanford University, and two years' work at the Stanford School of Nursing, San Francisco, the degree of Bachelor of Arts and the Nursing Diploma being conferred at the close of the five years. The completion of 135 units of University work and acquirement of 135 grade points are necessary before the student may enter the School of Nursing. The requirements for admission are the same as for other courses in the University.

CURRICULUM

FIRST YEAR

Autumn Quarter		Winter Quarter		Spring Quarter	
Subject	Units	Subject	Units	Subject	Units
Citizenship	4	Citizenship	4	Citizenship	4
*Chemistry 10	4	Chemistry 11	4	Chemistry 12	4
Language	3	Language	3	Language	3
Electives	4	Electives	4	Electives	4

Second Year

Language or Literature 3	English 2 3	English 2 3
History 3	History 3	History 3
**Biology 1 5	**Biology 2 4	Anatomy 112 (Embry.) 5
Electives 4	Electives 5	Electives 4

Third Year

Physiology 101 5	Physiology 102 5	Bacteriology 101, 102.. 6
Psychology 51 5	Electives 10	Anatomy (Special).... 5
Electives 5		Electives 4

This schedule presupposes entrance credit of 2 units in a foreign language, 1 unit in Chemistry, and 1 unit in History.

*Students offering no entrance credits in Chemistry will take courses 1, 2, and 3.

** Students having entrance credit in a biological science are advised to take Zoölogy 1 and Zoölogy 2 (Comparative Anatomy) autumn and winter quarters, respectively.

Some suggested electives are: Economics 2 (Elementary Sociology); Economics 101 (Labor Problems); Economics 112 (Social Processes); Economics 114 (Social Problems); Economics 116 (Immigration); Physical Education 1 (Personal Hygiene); Political Science 2 (State and Local Government); Political Science 110 (Administrative Organization); Psychology 55 (Experimental Psychology); Psychology 160 (Abnormal Psychology); Public Speaking 4 (Principles of Vocal Expression); Public Speaking 5 (Reading Aloud); Zoölogy 112 (Animal Genetics).

The degree of Bachelor of Arts in Pre-Nursing is given only for the five years' combined University and Nursing course. Students who wish to take the degree of Bachelor of Arts before transferring to the School of Nursing should register in one of the major departments of the University. By careful planning it is possible to fulfill both the requirements for the Bachelor's degree in the major department, and those of the Pre-Nursing curriculum.

Pre-Nursing students entering with advanced standing from other universities are required to take a minimum of 45 units of resident work at Stanford University before transferring to the School of Nursing. While this minimum of 45 units presupposes a residence of three University quarters, the completion of the collegiate part of the Pre-Nursing Course in this minimum of time is possible for only those students who have fulfilled the requirements of the first six quarters, including the Lower Division requirements.

Graduates of schools of nursing affiliated with an institution of collegiate rank may be granted, on recommendation of the Pre-Nursing Committee, a maximum advanced credit of forty-five units, provided they have also fulfilled the requirements for admission to the University. (For details see page 108.)

To qualify for the degree of Bachelor of Arts, graduates of schools of nursing admitted to advanced standing will be required to fulfill both the Lower Division requirements and those of the major department in which they ultimately register. (For details of requirements see *Registration Manual for Lower Division*, and the departmental announcements in this bulletin.)

Students interested in this course should confer with Professor C. S. Stoltenberg, Stanford University, or with Professor Maude Landis, Superintendent of Nurses, Stanford University Hospital, San Francisco.

MEMORIAL CHURCH

The Reverend David Charles Gardner, D.D., Chaplain
Warren D. Allen, Organist

Memorial Church stands in the center of the inner quadrangle group, facing the main entrance. It is of modified Moorish-Romanesque architecture, in the form of a cross with rounded ends. The extreme length is one hundred and ninety feet, the extreme width, one hundred and fifty feet. The exterior finish is like that of the other quadrangle buildings except for the mosaics of the façade, the central feature being a striking representation of the Sermon on the Mount. The interior walls are buff sandstone, with tooled face, relieved by elaborate carved designs and fifteenth-century mosaics of great beauty. The features of the apse are the marble altar, the stained glass windows representing the Nativity, the Crucifixion, and the Ascension, and the mosaics covering the wall surface. Behind the altar is a replica of Cosimo Rosselli's Last Supper, from the Sistine Chapel at Rome. To the right and left, running to the arch of the apse, are long panels, a *gloria dei angeli* surmounted by reproductions in mosaic of Michelangelo's Prophets. The cove ceiling is also done in mosaics representing angels with trumpets. The nineteen stained glass windows of nave, transept, and apse illustrate the Life of Christ. The windows of the clerestory contain single figures of Old and New Testament characters, and the mosaics depict mostly Old Testament scenes. The seating capacity of the church, including galleries, is about eighteen hundred.

Memorial Church is unsectarian and without formal organization, but linked to historic Christianity by its ministry and sacraments. The services are informal and varied, conserving the great principles of Christian worship.

SERVICES

Divine Worship and Sermon, Sunday, 11 A.M. (Holy Communion as announced.)
Vesper Service, Thursday, 4:45 P.M.

ORGAN RECITALS

Sunday, 7:30 P.M.; Tuesday, 4:15 P.M.; Thursday, 4:15 P.M.

MUSIC

Warren D. Allen, Organist, and Director of the University Choir
Ernest Whitney Martin, Associate Professor of Classical Literature, and Director of the University Band

1. Choir.—The choir sings at the morning service each Sunday in Memorial Church, the music consisting of anthem, chant, and hymns. Continuous course until end of year.
1 unit per quarter (Memorial Church) Rehearsal Th 7:35 P.M.
Autumn, 22; winter, 19; spring, 20; summer, 14

2. Oratorio.—A separate choir, formed for the performance of oratorio and other major choral works.
1 unit per quarter (Memorial Church) Rehearsal Th 8:20 P.M.
Autumn, 19; winter, 21

3. Orchestra.—A course in orchestral and ensemble playing for students with sufficient experience. Registration only upon passing of an individual trial.
1 unit per quarter (Allen) (Room 84) W 7:15–9:15 P.M.
Autumn, 20; winter, 19; spring, 22

4. Military Band.
1 unit, autumn quarter (Martin)
(Bandhouse) TTh 4:30–5:30 and third hour by arrangement
Autumn, 78

5. Concert Band.
1 unit, winter and *spring quarters (Martin)
(Bandhouse) TTh 7–8 P.M. and third hour by arrangement
Winter, 84: spring, 75

PHYSICAL EDUCATION AND HYGIENE FOR MEN

Thomas Andrew Storey, Professor of Hygiene and Physical Education for Men, Medical Adviser of Men, and General Director of Encina Gymnasium

Alfred Richard Masters, General Manager, Board of Athletic Control

Walter Henry Brown, Professor of Hygiene and Physical Education for Men, and Associate Medical Adviser of Men

Harry Beal Torrey, Professor of Hygiene and Physical Education

Royce Reed Long, Associate Professor of Physical Education and Hygiene for Men

Ernest Paul Hunt (Basketball), Harry Wilfred Maloney (Minor Sports), Robert Lyman Templeton (Track and Field), Glenn Scobey Warner (Football), Harry Meiggs Wolter (Baseball), Directors

Ernst Brandsten (Water Sports), Charles Wesley Davis (Intramural Sports), Claude E. Thornhill (Football), Associate Directors

James Bradshaw, William Boyd Ellington (Track and Field), Charles Myron Sprague (Swimming), J. Charles Winterburn (Football), Assistant Directors

Harold Jay Beaver, Edward Liston, Dell Theodore Lundquist, Herbert Lee Niebel, Earle Frederick Roth, Assistant Medical Advisers of Men

Elwyn Baidon Bugge, Ernest Nevers, Myron Reed Schall, Edward Anderson Smith, Ford Marlow Tussing, Edgar Lee Walker, Instructors

ORGANIZATION

The Department of Physical Education and Hygiene is composed of the following divisions: (*a*) Student Health Service, (*b*) Physical Training, (*c*) Informational Hygiene, (*d*) Administrative Hygiene, (*e*) Teacher Training, and (*f*) General Athletic and Business Management. The activities within these divisions are carried on by directors and their staffs and by a general manager and his staff. The organization as a whole is under a general director who is the executive head of the department.

OBJECTIVES

This department is concerned with:

1. The satisfaction of student interest in games, sports, contests, and sportsmanship; in physical development and vigor; and in the achievement of athletic skills.

2. The formation of habits that improve, maintain, and defend health—habits of exercise, recreation, and athletic competition with their involvements of individual and group hygiene; habits of periodic health examinations and of discriminating selection of health advisers, health literature, and health service.

3. The provision of programs of physical education and hygiene adapted to the needs of the individual student, whatever his limitations may be.

4. The production of an understanding of the basic facts that determine mental and physical health and of the applications of those facts for the benefit of the individual, his group, and society.

5. A capitalization of the character disciplines and of the training of social personality that may be furnished by experience in organized games and college athletics.

6. The training of student leaders and the preparation of men for professional service in the field of educational hygiene and physical education.

STUDENT HEALTH SERVICE

(1) A health examination given by this department is required during the first week of every quarter of all men then matriculating. This examination is requisite for the completion of their first registration in Stanford University. Students who would be a menace to the health welfare of their associates and students who are not likely to maintain a satisfactory health status under the pressure of student life are denied admission; (2) Subsequent conferences are arranged for and required of students in need of further observation; (3) Scheduled office hours for private consultations are arranged for students who voluntarily seek advice concerning their health problems; (4) A health examination is required of all candidates for athletic training prior to their admission to membership on a squad.

These examinations are used for the purpose of safeguarding and advising students relative to their limitations and possibilities in recreation, sport, and athletics and for their general health benefit, but the aim of the health service, in conformity with the objectives of hygiene and physical education, is informational and instructional as well as protective.

INTRAMURAL RECREATIONS AND SPORTS

Various opportunities are maintained by the department for voluntary individual and group participation in organized and unorganized intramural activities. All the facilities of the department are available for such usage daily at periods not covered by class schedules. Seasonal contests are scheduled in: Cross Country, Handball, Track (autumn quarter); Basketball, Tennis, and Swimming (winter quarter); and Baseball, Track, Relay Carnival, and Horseshoes (spring quarter). (See *Bulletin of Department of Physical Education and Hygiene for Men* for additional details.)

(Davis and Staff)

TEACHER'S RECOMMENDATION IN PHYSICAL EDUCATION AND HYGIENE (FOR MEN)

For the present the departmental recommendation will be limited to those men who satisfactorily complete the minor in Physical Education and Hygiene announced below. A major course is in preparation for establishment in case there is sufficient demand for such a major. Candidates for the regular high school credential who plan to use the minor will find it advantageous to register in the School of Biology for the degree of Bachelor of Arts and for their teaching major.

The candidate should consult with the Director of the department very early, preferably in his first quarter in the Lower Division, in order that his program may be planned with reference to his individual needs and followed through the four years required by the State Department of Education for

special certification or the five years requisite for the high school or junior college certificate (see *Announcement of School of Education* for explanation of these certificates). The minor in Physical Education and Hygiene has been set up to meet the needs of other candidates for teachers' recommendations than varsity team members and is in no way limited to that group.

TEACHING MINOR IN PHYSICAL EDUCATION AND HYGIENE

	Hours	Quarter Units
Lower Division Requirements		
1. Six quarters of Lower Division required courses (four with rating of "B" or better)	18	(6)
2. Course 150 (General Hygiene)	—	3
3. Course 151 (General Hygiene)	—	3
4. Course 152 (Individual Hygiene)	—	2
Upper Division Requirements		
1. Sports Courses (at least three different)	9	3
2. Course 153 (Group Hygiene)	—	2
3. Course 154 (Societal Hygiene)	—	2
4. Course 155 (History and Principles of Physical Education)	—	3
5. Course 160 (Organization and Administration of Physical Education)	—	3
6. Course 161 (Organization and Administration of Physical Education in Colleges and Universities)	2	6
Course 162 } Course 163 } (Management of Athletics)	3	
Course 165 (Organization of Intramural)	1	
Course 130 (Leaders' Courses)	1	
Course 170 (Sport Methods—Baseball)	2	
Course 171 (Sport Methods—Basketball)	2	
Course 172 (Sport Methods—Football)	2	
Course 173 (Sport Methods—Track)	2	

Lower Division Courses Recommended

1. Zoölogy 1	5
2. Zoölogy 2 (Comparative Anatomy)	5
3. Zoölogy 102 (Insects and Disease)	2
4. Chemistry 1, 2, and 3	12
or Chemistry 10, 11, and 12	12
5. Psychology 51 (General Psychology)	5
6. Economics 2 (Elementary Sociology)	5
7. Bacteriology 100	6
8. Physical Education and Hygiene	
30. (Leaders' Courses)	1
70. (Elementary Baseball Methods)	2
71. (Elementary Basketball Methods)	2
72. (Elementary Football Methods)	2
73. (Elementary Track Methods)	2

Upper Division Courses Recommended

1. Physiology 101	5
2. Physiology 102	5
3. Physiology 103	5
4. Zoölogy 108 (Mammalian Anatomy)	5
5. Chemistry 127 (Organic)	5
6. Bacteriology 101 (Sanitary Bacteriology)	3
7. Biology 160 (The Biology of Protoplasm)	5

ELEMENTARY AND BASIC COURSES

Open Primarily to Lower Division Students

1. Applied Physical Education and Hygiene.—A basic course in physical exercise, games, and sports set up to help students form health-habit programs that fit their needs, and to give them opportunities to gain skills in the

recreations and sports that interest them. On the basis of health examinations and proficiency tests, students are classified as to their eligibility to more advanced sport and athletic courses that develop special powers and skills, impose greater mental and physical stresses, and involve more severe disciplines of character and personality and therefore call for a more careful regimen of hygiene. Required of all men students for six quarters or until completion of the Lower Division requirement. Three periods a week.

Autumn, *winter, *spring, and *summer quarters (Long and Staff)
Autumn, 304; winter, 211; spring, 187; summer, 74

2–4. Special Applied Physical Education and Hygiene.—Miscellaneous health-habit programs adapted to fit the needs of the individual student for whom the usual class activities are not indicated or suitable. Admission only on recommendation of General Director or Medical Adviser of Men. May be used to satisfy Lower Division requirement. Three periods a week.

Autumn, *winter, *spring, and *summer quarters

2. Corrective Gymnastics.—Admission on recommendation of the Medical Adviser of Men.

(Brown, Maloney)
Autumn, 21; winter, 26; spring, 22; summer, 11

3. Modified Programs.—Open to sick or injured students transferred from other courses in the department by their instructors to the Medical Adviser of Men for counsel and help. Students who take intelligent care of their health problems under these special circumstances will be recorded as having satisfied the objectives of the Lower Division requirement in Physical Education and Hygiene.

(Storey, Brown, Niebel, Torrey)
Autumn, 5; winter, 3; spring, 3; summer, 1

4. Adjusted Programs.—Adjustments of health-habit programs to meet the exceptional difficulties of the over-loaded student. Admission on approval of the General Director of the department.

(Storey, Brown)
Autumn, 2; winter, 62; spring, 50; summer, 2

12–24. Sports Courses, Elementary.—Habit-forming and discipline courses open to students who have demonstrated their satisfactory basic physical eligibility in Course 1. May be used to satisfy the Lower Division requirement. Three periods a week.

12. Boxing (Maloney, Schall)
Autumn, 45; winter, 59; spring, 44; summer, 12

13. Fencing (Maloney, Bugge)
Autumn 22; winter, 25; spring, 18; summer, 2

19. Soccer (Maloney)
Autumn, 24; spring, 28

21. Tennis (Bugge)
Autumn, 84; winter, 80; spring, 65; summer, 37

24. Diving (Smith, Sprague)
Autumn, 25; winter, 11; spring, 21; summer, 8

Courses distributed in autumn, winter, spring, and summer quarters

30. Leaders Course in General Physical Education Activities.—A course for qualified Lower Division students who are looking forward to the teaching of physical education. The course provides practice in gymnastics, game and athletic activities; the organization of material for class work; adaptation of activities for different groups; practice in the leadership of groups under supervision of instructor. Open by permission. Will fulfill

Lower Division requirement. Three periods a week with some outside preparation.

Spring and *summer quarters (Long and Staff)
Spring, 1; summer, 1

40–45. Athletic Training Courses, Freshman.—Minor and major freshman athletic sport disciplines open by permission of the director of the sport involved to a limited number of qualified students who are eligible to participate in intercollegiate athletics under the rules and regulations adopted by the University. Five periods a week during the training season, then three periods a week until the end of the quarter. May be used to satisfy the Lower Division requirement.

40. Freshman Baseball.
Winter and *spring quarters (Wolter and Staff)
Winter, 15; spring, 18

41. Freshman Basketball.
Autumn and *winter quarters (Hunt and Staff)
Autumn, 12; winter, 16

42. Freshman Football.
Autumn quarter (Warner and Staff)
Autumn, 41

43. Freshman Swimming.
Autumn, *winter, and *spring quarters (Brandsten and Staff)
Autumn, 22; winter, 24; spring, 21

44. Freshman Track and Field.
Autumn, *winter, and *spring quarters (Templeton and Staff)
Autumn, 23; winter, 41; spring, 31

45. Freshman Tennis.
Autumn, *winter, and *spring quarters (Tussing)
Autumn, 31; winter, 25; spring, 14

70–73. Special Methods Courses.—These courses are concerned with the methods and techniques of Applied Physical Education and Hygiene for the improvement of training and the development of skills and for the preparation of teachers and coaches. Each course is planned and given by the director of the activity involved with the assistance of his staff. In general each combination of elementary and advanced courses presents: (*a*) The history of its special activity or activities; (*b*) its growth in the colleges of the United States; (*c*) its standards of sportsmanship; regulations, régime of conditioning and training; (*d*) hazards of immaturity, physical defects, age and weight and of overemphasis; (*e*) elementary methods (Courses 70, 71, 72, and 73) and advanced methods (Courses 170, 171, 172, and 173); and (*f*) techniques for the preparation of teachers for service in secondary schools, junior colleges, and universities. Classroom presentations; graphic illustrations; field, court, and floor demonstrations. Admission only by permission of instructor in charge of course.

70. Elementary Baseball Methods.—Open to men who have had satisfactory baseball experience before entering college or an equivalent experience and who have qualified under the requirements of Applied Physical Education and Hygiene 1. Sections limited to 30. Two classroom and three field demonstration periods a week.

2 units, autumn quarter (Wolter and Staff)
Autumn, 10

71. Elementary Basketball Methods.—Open to men who have had satisfactory basketball experience before entering college and who have quali-

fied under the requirements of Applied Physical Education and Hygiene 1. Sections limited to 25 men each. Two classroom and three court demonstration periods a week.

2 units, autumn and *summer quarters (HUNT and STAFF)
Autumn, 7; summer, 11

72. Elementary Football Methods.—Open to men who have had acceptable experience on secondary-school, junior college, or freshman teams and who have satisfied the pertinent requirement of Applied Physical Education and Hygiene 1. Sections limited to 25 men each. Two classroom and three field demonstration periods a week.

2 units, winter and *summer quarters (WARNER and STAFF)
Winter, 30; summer, 13

73. Elementary Track and Field Methods.—Open to men who have had satisfactory track and field experience before entering college and who have qualified under the requirements of Applied Physical Education and Hygiene 1. Sections limited to 25 men each. Two classroom and three track and field demonstration periods a week.

2 units, autumn and *summer quarters (TEMPLETON and STAFF)
Autumn, 12; summer, 17

ADVANCED COURSES IN PHYSICAL EDUCATION AND HYGIENE

101. Applied Physical Education and Hygiene.—Elective course for general physical exercise, games, and sports. Habit-forming and skill-developing course open to men students who have satisfied the Lower Division requirement in physical education and hygiene. Three periods a week.

1 unit, autumn, *winter, *spring, and *summer quarters (LONG and STAFF)
Autumn, 27; winter, 25; spring, 31; summer, 11

102–104. Special Applications of Physical Education and Hygiene.—Miscellaneous programs adapted to fit the needs of individual students for whom the usual class activities are not indicated or suitable. Admission only on recommendation of General Director or Medical Adviser of Men.

102. Corrective Gymnastics.—Admission on recommendation of Medical Adviser of Men. Three periods or more a week.

1 unit, autumn, *winter, and *spring quarters (BROWN, MALONEY)
Autumn, 4; winter, 7; spring, 1

103. Modified Programs.—Open to sick or injured students transferred from other courses in the department by their instructors to the Medical Adviser of Men for counsel and help. Students who take intelligent care of their health problems under these special circumstances will be recorded as having satisfied the objectives of the course. Daily, hour by arrangement.

1 unit, autumn, *winter, *spring, and *summer quarters (STOREY, BROWN, NIEBEL)
[Not given in 1928–29]

104. Adjusted Programs.—Adjustments of health-habit programs to meet the exceptional difficulties of the over-loaded student. Admission on approval of the general director; hour by arrangement.

1 unit, spring quarter (STOREY, BROWN)
Spring, 6

112–121. Sports Courses, Advanced.—Habit-forming and discipline courses open to students whose qualifications satisfy the instructor in charge. Three periods a week.

112. Boxing (Maloney, Schall)
Autumn, 32; winter, 44; spring, 25; summer, 2

113. Fencing (Maloney, Bugge)
Autumn, 8; winter, 14; spring, 12; summer, 3

114. Football (Warner)
Winter, 37; spring, 84

116. Gymnastics (Long)
Autumn, 17; winter, 19; spring, 15

119. Soccer Football (Maloney)
Autumn, 36; spring, 25

120. Swimming (Sprague)
Autumn, 48; winter, 26; spring 55; summer, 34

121. Tennis (Bugge)
Autumn, 44; winter, 46; spring, 66; summer, 17

1 unit, courses distributed in autumn, winter, spring, and summer quarters

130. Leaders Course in General Physical Education Activities.—A course similar to, but more advanced than, Course 30 described above. Three periods a week with some additional outside preparation.
1 unit, autumn quarter (Long and Staff)
Autumn, 1

140–145. Athletic Training Courses, Advanced.—Varsity athletic sport disciplines open by permission of the director of the sport involved to a limited number of qualified students who are eligible to participate in intercollegiate athletics under the rules and regulations adopted by the University. Five periods a week during the training season, then 3 periods a week until the end of the quarter.

140. Varsity Baseball.
1 unit, winter and *spring quarters (Wolter and Staff)
Winter, 38; spring, 27

141. Varsity Basketball.
1 unit, autumn and *winter quarters (Hunt and Staff)
Autumn, 20; winter, 14

142. Varsity Football.
1 unit, autumn quarter (Warner and Staff)
Autumn, 105

143. Varsity Swimming.
1 unit, autumn, *winter, and *spring quarters (Brandsten and Staff)
Autumn, 42; winter, 41; spring, 34

144. Varsity Track and Field.
1 unit, autumn, *winter, and *spring quarters (Templeton and Staff)
Autumn, 72; winter, 84; spring, 68

145. Varsity Tennis.
1 unit, autumn, *winter, and *spring quarters (Tussing)
Autumn, 43; winter, 29; spring, 16

150–154. Informational Hygiene Courses.—Discussion courses, open to Lower and Upper Division students.

150. General Hygiene.—General Constructive Hygiene. This course is concerned with the influences that produce and maintain normal physiology. It involves the determining and contributory causes of somatic and mental health: heredity, nutrition, excretion, exercise, work, play, and rest, favorable physical and social environment, economic resource, and pertinent relations of higher education and political organization. Open to all students. Sections limited to 25 students each.
3 units, autumn, *winter, and *summer quarters (Brown, Long)
Autumn, 94; winter, 101; summer, 78

151. General Hygiene (continued).—General Defensive Hygiene. This course is concerned with the influences that disturb normal physiology, the causes of disease, carriers of pathogens, contributory causes of poor health, the prevention of disease, and the defense of health. Prerequisite: Course 150. Sections limited to 25 students each.
3 units, winter, *spring, and *summer quarters (Brown, Long)
Winter, 52; spring, 67; summer, 53

152. Individual Hygiene.—The applications of General Hygiene by the mature individual for the maintenance and defense of his personal health. Prerequisites: Courses 150 and 151. Sections limited to 25 students each.
2 units, spring quarter (Brown, Long)
Spring, 32

153. Group Hygiene.—The applications of general hygiene by the family group, school group, occupational group, and other typical groups for the production, maintenance, and defense of the health of the members of the group. Involves the hygiene of parenthood, prenatal hygiene, the hygiene of infancy, childhood, and adolescence, school hygiene, occupational hygiene. Prerequisites: Courses 150 and 151. Sections limited to 25 students each.
2 units, autumn quarter (Brown, Long)
Autumn, 30

154. Societal Hygiene.—The applications of general hygiene through public opinion and by governing bodies for the production, maintenance, and defense of the public health; involves the idea of intergroup hygiene and includes rural community, municipal, county, state, and national hygiene. Prerequisites: Courses 150 and 151. Sections limited to 25 students each.
2 units, spring and *summer quarters (Brown)
Spring, 20; summer, 1

155. History and Principles of Physical Education.—Should precede Courses 160 and 161.
3 units, autumn and *summer quarters (Long)
Autumn, 13; summer, 6

160–165. General Methods Courses.—For the preparation of men for teaching positions in secondary schools, junior colleges, and universities.

160. Organization and Administration of Physical Education and Hygiene in Secondary Schools.—Should be preceded by Course 155.
3 units, winter and *summer quarters (Long, Hunt, Ellington)
Winter, 5; summer, 4

161. Organization and Administration of Physical Education and Hygiene in Colleges and Universities.—Should be preceded by Course 155.
2 units, spring quarter (Long)
Spring, 6

162. Management of Athletics.—A classroom course meeting three periods a week requiring outside preparation and field experience in the conduct of managerial duties.
2 units (given on completion of following course, 163)
autumn and *winter quarters (Tussing)
Autumn, 12; winter, 4

163. Management of Athletics (continued).—Three periods a week of participation in managerial functions in which the student will perform office and field work in various phases of the subject under the instructor's supervision. Prerequisite: Course 162.
1 unit, winter and *spring quarters (Tussing)
Winter, 2; spring, 14

165. Organization, Conduct, and Officiating of Intramural Sports.—Three class sessions a week with three hours of preparation, organization of team play, and practice in officiating.
2 units, winter quarter (Davis)
Winter, 6

170–173. Special Methods Courses, Advanced.—Upper Division courses open on permission of instructor to men who have had satisfactory varsity or equivalent experience in the athletic sport involved. (For description of Special Methods Courses, see Lower Division Courses 70–73.)

170. Advanced Baseball Methods.—Instruction, tests, and ratings for recommendations for teaching positions. Prerequisite: Course 70. Fourth-year men preferred. Sections limited to 30. Two classroom and three field demonstration periods a week.
2 units, summer quarter (Wolter and Staff)
Summer, 6

171. Advanced Basketball Methods.—Instruction, tests, and ratings for recommendations for teaching positions. Prerequisite: Course 71. Fourth-year men preferred. Sections limited to 25 men each. Two classroom and three court demonstration periods a week.
2 units, spring and *summer quarters (Hunt and Staff)
Spring 13; summer, 7

172. Advanced Football Methods.—Instruction, tests, and ratings for recommendations for teaching positions. Prerequisite: Course 72. Fourth-year men preferred. Sections limited to 25 men each. Two classroom and three field demonstration periods a week.
2 units, spring and *summer quarters (Warner and Staff)
Spring, 19; summer, 8

173. Advanced Track and Field Methods.—Instruction, tests, and ratings for recommendations for teaching positions. Prerequisite: Course 73. Sections limited to 25 men. Two classroom and three track and field demonstration periods a week.
2 units, summer quarter (Templeton and Staff)
Summer, 5

PHYSICAL EDUCATION FOR WOMEN

Helen Masters Bunting, Assistant Professor, and Director of Physical Education for Women
Clelia Duel Mosher, Professor of Personal Hygiene, and Medical Adviser of Women
Eleanor Southgate Davis, Acting Director of Physical Education for Women (Summer Quarter)
Marion Hague Rea, Acting Medical Adviser of Women (Summer Quarter)
Yolanda Shaw Allen, Instructor
Wilma Eda Fenner, Acting Instructor (Summer Quarter)
Georgina Meyer Burk, Helen Stewart Cramer, Marjorie Aldrich Landon, Assistants in Instruction
Lynnette Vandervort, Assistant to Medical Adviser of Women
Nina M. Kohler, Secretary

The aim of Roble Gymnasium, as a laboratory of personal hygiene, is to improve the standard of health of the women; to increase their mental and physical efficiency; to foster a spirit of democracy and sportsmanship; and so to prepare for the highest type of citizenship.

REGULATIONS AND REQUIREMENTS

Physical Education is required of all Lower Division students, and satisfactory completion of each quarter in Physical Education is essential to promotion to the Upper Division. In general, the arrangement is as follows: One hour per week of marching and self-testing activities, and two hours per week for one quarter each of dancing, swimming, and an out-door sport, or a combination of any of the two-hour courses. After one quarter has been successfully passed in each of these two-hour courses the student chooses any two-hour courses offered to complete her required number of quarters.

A physical examination is made of each student in order to give advice as to work to be undertaken and to aid the student in removing any remediable physical handicaps.

One unit of university credit per quarter is given for three hours per week of satisfactory work in the activities courses, whether elective or required.

Costume.—The gymnasium suit is especially designed for Stanford students and must be purchased at Roble Gymnasium. A limited number of suits may be rented at a nominal cost in special cases, upon consultation with the Director. Regulation shoes are required for gymnastic and out-door classes. Swimming suits are provided by the University. Each student provides her own caps and towel tickets. The complete outfit costs approximately fifteen dollars.

Tennis.—The student must furnish her own racquet and balls.

Removal of Property.—All suits, shoes, racquets, and other personal property not claimed within three days after the close of classes in this department each quarter are collected and disposed of.

Fees.—A fee of $1.00 per day is imposed for needless late registration in required classes. Special fees are charged as follows: Archery, $2.00; corrective gymnastics, $1.00; locker, 50 cents.

Deposit.—A deposit of $1.00 is required for hockey, 50 cents of which is refunded when property is returned.

PERSONAL HYGIENE

1. Personal Hygiene.—A study of some of the factors which make for normal development and maximum efficiency in everyday living. Two sections.
3 units, winter and *spring quarters (MOSHER) MWF 10, 11
Winter, 37; spring, 49

PHYSICAL EDUCATION

1–2. Gymnastics.

1. Marching and Self-Testing Activities (one hour), combined with a two-hour course in dancing, swimming, or sports.
1 unit per quarter (ALLEN)
Autumn, 17; winter, 11; spring, 13

2. Remedial Gymnastics (two hours), combined with any other course in Physical Education. Required of freshmen and sophomores whose posture demands special correction or who have other remediable handicaps. Elective for juniors and seniors. Open only on consultation.
1 unit per quarter (ALLEN, DAVIS)
Autumn, 17; winter, 31; spring, 18; summer, 9

10–15. Dancing.

10. Elementary Natural Dancing (two hours).
Autumn, 42; winter, 49; spring, 24; summer, 5

11. Intermediate Natural Dancing (two hours).
Autumn, 8; winter, 7; spring, 6

12. Advanced Natural Dancing (two hours).
Autumn, 32; winter, 26; spring, 13

13. Dancing Composition (two hours). Open only on consultation.
Autumn, 14; winter, 16; spring, 7

15. Folk Dancing (two hours).
Winter, 48

One quarter of either Course 10, 11, 12, or 15 required in freshman year. One or more additional quarters may be taken in sophomore year in fulfillment of the Physical Education requirement. Elective for juniors and seniors.
Combined with any other Physical Education course.
1 unit per quarter (CRAMER, DAVIS)

20–27. Swimming and Diving.

20. Elementary Swimming (two hours).
Autumn, 18; winter, 8; spring, 18; summer, 46

21. Intermediate Swimming. Requirement, 75 feet, any stroke (two hours).
Autumn, 25; spring, 41; summer, 41

22. Advanced Swimming. Requirement, 75 feet, crawl or trudgeon stroke (two hours).
Autumn, 27; winter, 22; spring, 20; summer, 26

23. Competitive Swimming. Prerequisite: Course 22 or its equivalent.
Spring, 20

25. Elementary Springboard Diving. Requirement, straight dive from three-foot board (two hours).

26. Intermediate Springboard Diving. Requirement, running swan dive, back dive, forward jackknife dive from three-foot board.

27. Advanced Springboard Diving. Requirement, in addition to that of Course 26, backward jackknife dive, and forward and backward somersaults from three-foot board.

One quarter of either swimming or diving required in freshman year. One or more additional quarters may be taken in sophomore year in fulfillment of the Physical Education requirement. Elective for juniors and seniors.

Combined with any other Physical Education course.
1 unit per quarter (LANDON, FENNER)
Courses 25, 26, and 27, combined: Autumn, 19; spring, 37; summer, 7

30–242. Sports.

30. Elementary Archery

31. Intermediate Archery

32. Advanced Archery
Courses 30, 31, and 32, combined: Autumn, 40; winter, 40; spring, 45

33. Freshman Basketball
Winter, 41

34. Sophomore Basketball
Winter, 35

133. Junior Basketball
Winter, 12

134. Senior Basketball

234. Graduate Basketball
Courses 134 and 234, combined: Winter, 13

35. Freshman Hockey
Autumn, 37

36. Sophomore Hockey
Autumn, 32

135. Junior Hockey
Autumn, 28

136. Senior Hockey

236. Graduate Hockey
Courses 136 and 236, combined: Autumn, 20

38. Elementary Tennis
Autumn, 32; winter, 34; spring, 28; summer, 17

39. Intermediate Tennis
Autumn, 27; winter, 26; spring, 30; summer, 12

40. Advanced Tennis
Autumn, 17; winter, 12; spring, 36

140. Competitive Tennis
Spring, 10

41. Freshman Track

42. Sophomore Track

141. Junior Track

142. Senior Track

242. Graduate Track
Courses 41, 42, 141, 142, and 242, combined: Spring, 25

One quarter of one sport required in freshman year; one or more additional quarters may be taken in sophomore year in fulfillment of the Physical Education requirement. Elective for juniors and seniors.

Combined with any other Physical Education course.
1 unit per quarter (ALLEN, BUNTING, BURK, DAVIS)

110–299. Professional Courses.—Professional courses for training teachers of Physical Education. In preparation.

SCHOOL OF PHYSICAL SCIENCES

Carl Lucas Alsberg, Eliot Blackwelder, Hans Frederik Blichfeldt, James William McBain, David Locke Webster *(Chairman), Executive Committee*

The School of Physical Sciences consists of the departments of Chemistry, Geology, Mathematics, and Physics. Its faculty includes all members of these departments and certain professors of Biology, Engineering, Medicine, and Philosophy whose work is related to the physical sciences.

Programs of study are offered by the individual departments leading to degrees in their respective sciences. For the Bachelor's degree these programs are supplemented by a general program offered by the School leading to the degree of Bachelor of Arts in the Physical Sciences. Each candidate for the degree of Bachelor of Arts in the Physical Sciences will be required to take forty-five units of work in the physical sciences while he is registered in the Upper Division, and to have or acquire a reading knowledge of French or German. His program of study must be approved by a special adviser appointed by the Executive Committee of the School of Physical Sciences. It is the policy of the faculty of the School that such programs of study must consist largely of advanced work.

1–3. Introduction to the Physical Sciences.—Lectures on the more important aspects of astronomy, geology, physics, and chemistry. The course is not designed to prepare students for advanced work in these subjects, but to show them the nature of the field covered and to enable them to appreciate in some degree the influence these rapidly advancing sciences have on modern life. Although the course is continuous through the year, any quarter may be taken separately. High-school physics and chemistry are not prerequisites, but are desirable.

1. The principal features of astronomy and geology will be covered briefly in this section of the course, which is not open to students having credit in Elementary Geology.

3 units, autumn quarter (Blackwelder) MWF 8
Autumn, 93

2. Lectures and demonstrations in mechanics, heat, light, sound, electricity, inorganic chemistry, and modern physics, with particular emphasis on modern theories of atomic structure. This course not open to students having credit in Physics 100.

3 units, winter quarter (Harrison) MWF 8
Winter, 65

3. Discussion of the philosophical aspects of the physical sciences and their relation to other branches of learning.

3 units, spring quarter (Tanner, Swain) MWF 8
Spring, 115

CHEMISTRY

Robert Eckles Swain, Edward Curtis Franklin, James William McBain, Stewart Woodford Young, Professors
Carl Lucas Alsberg, Director, Food Research Institute
John Pearce Mitchell, Registrar
Nathan Van Patten, Director of University Libraries
William Henry Sloan, Associate Professor
Francis William Bergstrom, Maurice Loyal Huggins, James Murray Luck, Mary Evelyn Laing McBain, George Sutton Parks, Assistant Professors
Kenneth Keith Kelley, William Bell Lee, Acting Assistant Professors
Philip Albert Leighton, Instructor
Herbert Giles Tanner, Acting Instructor

ENTRANCE PREPARATION

Students who intend to major in chemistry are advised to offer entrance credit in the preparatory subjects of chemistry, physics, mathematics (including trigonometry and solid geometry) and German (two units). Those without entrance credit or equivalent training in the foregoing subjects may experience some difficulty, especially in the engineering chemistry course, in meeting departmental requirements for graduation in the usual time.

REQUIREMENTS FOR GRADUATION

Candidates for graduation in chemistry must offer the equivalent of two years (at least 22 units) of college work in German, or two years of French and one year of German. Whenever possible, this foreign language should be completed before the Upper Division work is begun.

Major students should complete the courses listed under one of the following curricula to meet the requirements for the degree of Bachelor of Arts in Chemistry. Whenever this is possible, the courses listed in each of these curricula for the first and second years should be completed before the work of the Upper Division is undertaken. Failure to meet fully these requirements may lead to difficulties in the last two years.

A. General Chemistry

[Recommended for those who are pursuing work in chemistry particularly as a basis for teaching and scientific research.]

First and Second Years.—Lower Division requirements, including Chemistry 1, 2, 3, 4, and 20; or 10, 11, and 12; Physics 1, 2, and 100 (at least 12 units); Mathematics 10, 11, 21, and 22 (23 also advised) or their equivalent; and German.

Third and Fourth Years.—Chemistry 111, 112, 121, 122, 123, 130, 171, 173, and 190.

B. Biological Chemistry

[Particularly adapted to students who are looking forward to work along medical or biochemical lines.]

First and Second Years.—Lower Division requirements, including Chem-

istry 1, 2, 3, 4, and 20; or 10, 11, and 12; Physics 1, 2, and 100 (at least 12 units); Mathematics 10, 11, and 21, or their equivalent; and German.

Third and Fourth Years.—Chemistry 111, 112, 121, 123, 130, 141, 142, 143, 144, and 190; Physiology 103; Bacteriology 100 or 201.

C. Engineering Chemistry

[Intended especially for students who desire to fit themselves for positions of responsibility in connection with work in industries involving chemical knowledge and skill. This curriculum comprises the undergraduate work preparatory to the advanced degree of Engineer in Engineering Chemistry, which is awarded at present upon the completion of one year of graduate work.]

First and Second Years.—Lower Division requirements, including Chemistry 1, 2, 3, 4, and 20; or 10, 11, and 12; Mathematics 10, 11, 21, 22, and 23; Civil Engineering 1, 2, and 30; and German.

Third and Fourth Years.—Chemistry 111, 112, 114, 121, 122, 123, 130, 171, and 173; Civil Engineering 31, 106, and 110; Physics 13 and 14; Mechanical Engineering 10 and 11 or 12.

THE TEACHER'S RECOMMENDATION

The minimum requirements for recommendation to teach chemistry in the high school are given below. These are respectively the minor and major requirements for students who have taken one year of chemistry in the high school and have passed the departmental placement examination for admission to Course 10 in General Chemistry. Students who do not qualify for admission to Course 10 must take Courses 1, 2, 3, 4, and 20 (19 units) instead of Courses 10, 11, and 12 (12 units). Course 130 (Physical Chemistry Laboratory) may be substituted for Course 122 (Organic Chemistry Laboratory).

a) To teach chemistry as a minor high-school subject: Courses 10, 11, and 12 (General Chemistry); 121 and 123 (Organic Chemistry). Total 22 units.

b) To teach chemistry as a major high-school subject: Courses 10, 11, and 12 (General Chemistry); 111 and 112 (Quantitative Analysis); 121, 122, 123 (Organic Chemistry). Elective, 4 units of Upper Division work. Total 32 units.

ADVANCED DEGREES

After October 1, 1929, the degree of Engineer in engineering chemistry will be conferred only on those candidates who have completed two years of graduate work in addition to the requirements for the degree of Bachelor of Arts as given under Curriculum C.

Prior to October 1, 1929, this degree will be awarded upon the completion, in addition to the requirements for the degree of Bachelor of Arts in engineering chemistry, of three quarters of graduate work. This work shall include a thesis based on laboratory work and, in addition to other selected graduate courses in chemistry, at least eight units of advanced work in engineering.

Applicants for the degree of Master of Arts in chemistry will be expected to complete, in addition to the requirements for the Bachelor's degree, the equivalent of forty-five units of work in the University, of which

approximately two-thirds must be in the department. This work will include a thesis based on laboratory work. Courses 171 and 173 must also be taken if these were not included in the undergraduate work.

Candidates for the degree of Doctor of Philosophy in chemistry will follow such courses as are approved by the department faculty, subject to general University regulations.

In addition to the general requirements laid down by the University Committee on Graduate Study, each candidate for the degree of Doctor of Philosophy in Chemistry is required to take the preliminary qualifying examination in the Department of Chemistry during his first quarter of study for the doctorate. This is a written examination of approximately eight hours duration which is given during the first half of each quarter. In general it covers the fields of inorganic, organic, and physical chemistry, general physics and elementary mathematics (including calculus). In the special case of students proceeding to their doctorate in biochemistry, questions in biochemistry and biology will be substituted to some extent for those in physical chemistry, physics, and mathematics.

It is the policy of the department to encourage and support in every possible way the pursuit of research and of other work along advanced lines by students whose interest and training qualify them for undertaking it. A list of the published papers, and other information in regard to the research work carried on in the department during the past academic year, will be sent upon application.

FELLOWSHIPS AND SCHOLARSHIPS

In addition to the University fellowships and scholarships which are open to properly qualified students, there are at present four departmental fellowships in chemistry, three teaching fellowships, and the DuPont Fellowship. These are open only to graduate students. The John Maxson Stillman Scholarship and the Henry Windt Junior Memorial Scholarship are open to graduates and undergraduates. Holders of teaching fellowships are expected to devote approximately twelve actual hours per week to assistance in teaching. There are also a number of teaching assistantships open to advanced students.

COURSES OF INSTRUCTION

General Chemistry.—A systematic treatment of chemical principles and their applications. Open to all students. Courses 1, 2, and 3 are designed for students who have not taken chemistry in the high school or whose previous training is not adequate to admit them to Course 10. Courses 10, 11, and 12 cover the same general field more thoroughly. Students registering for General Chemistry who have had previous training in chemistry will take a placement examination for admission to Course 10 to be given at the opening of the autumn quarter.

1. General Chemistry.—For students who have had no chemistry and for those who fail to pass the placement examination for admission to Course 10. Only 3 units of credit are given to students who have entrance credit in chemistry.

4 units, autumn and *summer (first term) quarters (MITCHELL, LEE, LEIGHTON) Lec. MW 8; Lab. and recitation MT or WTh 1:05–4:05

Autumn, 172; summer, 8

2. General Chemistry.—Continuation of Chemistry 1.
4 units, winter quarter (Mitchell, Leighton) Lec. MW 8; Lab. and recitation MT or WTh 1:05–4:05
Winter, 185

3. General Chemistry.—Continuation of Chemistry 2.
4 units, spring and *autumn quarters (Mitchell, Leighton) Lec. MW 8; Lab. and recitation MT or ThF 1:05–4:05
Autumn, 15; spring, 136

4. Principles of Inorganic Chemistry.—Lectures dealing with the more important theories and generalizations of inorganic chemistry. Prerequisite: Chemistry 3. Not open to students who have completed Chemistry 12.
3 units, winter and *summer quarters (Swain) MWF 11
Winter, 39; summer, 2

10. General Chemistry.—For students who pass the placement examination.
4 units, autumn quarter (J. W. McBain, Huggins, Kelley) Lec. TTh 8; Lab. and recitation MT or ThF 1:05–4:05
Autumn, 111

11. General Chemistry.—Continuation of Chemistry 10.
4 units, winter quarter (J. W. McBain, Huggins, Kelley) Lec. TTh 8; Lab. and recitation MT or ThF 1:05–4:05
Winter, 73

12. General Chemistry.—Continuation of Chemistry 11.
4 units, spring quarter (J. W. McBain, Huggins, Kelley) Lec. TTh 8; Lab. and recitation MT or ThF 1:05–4:05
Spring, 38

20. Qualitative Analysis.—Open to students who have completed Course 3. This course is required of chemistry majors who have not completed Course 12, or its equivalent.
4 units, autumn and winter quarters (Tanner) 3 afternoons
Autumn, 20; winter, 9

111. Quantitative Analysis.—Lecture course. Must be taken in conjunction with Course 112.
1 unit, autumn, *winter, and *summer quarters (Sloan) TTh 3:05
Autumn, 51; winter, 31; summer, 20

112. Quantitative Analysis.—Introductory. Training in manipulation in gravimetric and volumetric methods. Open to students who have completed Course 12 or 4 or 20. Not open to first-year students. Given in conjunction with Course 111. Five units required of all chemistry majors.
4 or 5 units, autumn, *winter, and *summer quarters (Sloan) 4 or 5 afternoons
Autumn, 48; winter, 26; summer, 20

114. Quantitative Analysis.—A continuation of Course 112, principally gravimetric methods.
5 units, autumn, *winter, and *summer quarters (Sloan) 5 afternoons
Autumn, 5; winter, 5; summer, 2

121. Organic Chemistry.—Lectures and reviews on the chemistry of carbon compounds. Open to students who have completed Course 12 or 4 or 20.
5 units, winter quarter (Franklin) MTWThF 11
Winter, 59

122. Organic Preparations.—Preparation and study of typical carbon compounds. Open in connection with Courses 121 and 123 to students who have completed Course 12 or 4 or 20.
5 units, winter and *spring quarters (Bergstrom) 5 afternoons
Winter, 15; spring, 12

123. Organic Chemistry.—Continuation of Chemistry 121.
5 units, spring quarter (BERGSTROM) MTWThF 11
Spring, 60

124. Analytical Method of Organic Chemistry.—Qualitative organic analysis with an introduction to the study of mixtures. Organic combustion analysis, Dumas nitrogen method, Carius halogen determination. An introduction to technical organic analysis.
5 units, spring quarter (BERGSTROM) 5 afternoons
Spring, 3

127. Elementary Organic Chemistry.—A condensed lecture course in organic chemistry, offered particularly for students in biology and medicine, but open to all students who have completed Course 12 or 4 or 20. Not for chemistry majors.
5 units, winter and *summer quarters (BERGSTROM)
(winter) MTWThF 8; (summer) MTWThF 10
Winter, 40; summer, 27

128. Organic Chemistry.—A laboratory course designed especially to accompany Course 127. Not for chemistry majors.
3 units, winter and *spring quarters (BERGSTROM) 3 afternoons
Winter, 11; spring, 24

130. Physical Chemical Measurements.—Exercises in the practice of physical-chemistry laboratory methods. Open to students who have completed Chemistry 112 and Physics 2 or 14.
3 units, winter and *spring quarters (PARKS) MWF 1:05–4:05
Winter, 16; spring, 15

141. Biochemistry.—Lectures on the chemical composition of the tissues and secretions of the animal body. A knowledge of logarithms is advisable. Open to students who have completed Courses 121 and 123, or 127.
2 units, autumn and *summer (first term) quarters (LUCK) (autumn) TTh 8
(summer) MTWTh 8
Autumn, 49; summer, 18

142. Biochemistry.—A laboratory course including a preliminary study of the proteins, carbohydrates, and fats, and the action of the various digestive fluids upon them; followed by a chemical examination of the bile, blood, milk, and the chief tissues of the animal body. A knowledge of logarithms is advisable. In connection with Course 141. Prerequisites: Courses 123 (or 127), 111, and 112.
2 or 3 units, autumn and *summer (first term) quarters (LUCK) MTW 1:05–4:05
Autumn, 46; summer, 17

143. Biochemistry.—Continuation of Course 141, with particular reference to such topics as the nutrition, metabolism, and the waste products of the human organism.
2 units, winter quarter (LUCK) TTh 8
Winter, 48

144. Biochemistry.—Continuation of Course 142. The work of this course is devoted chiefly to the quantitative analysis of milk, blood, and urine.
2 or 3 units, winter quarter (LUCK) MTW 1:05–4:05
Winter, 44

147. Chemistry of Protoplasm.—Selected topics in the chemical organization of protoplasm.
1 unit, autumn quarter (ALSBERG) W 11
Autumn, 29

151. Advanced Inorganic Chemistry.—Advanced topics in inorganic chemistry, including the rarer elements, radioactivity, catalysis, and the chemistry of the higher order compounds.
2 units, spring quarter (SWAIN) [Not given in 1928–29]

171. Physical Chemistry.—A lecture and problem course dealing with the elements of physical chemistry. Open to students who have completed Chemistry 111, 112, 121, Physics 1, 2, and 100 (or their equivalent), and Mathematics 10, 11, 21, and 22 (or their equivalent).
4 units, autumn quarter (PARKS) MTWF 8
Autumn, 51

173. Physical Chemistry.—Continuation of Chemistry 171, with special emphasis upon the application of thermodynamics to chemistry.
4 units, winter and *summer quarters (PARKS) MTWF 8
Winter, 40; summer, 1

175. Methods of Crystal Structure Analysis.—Lectures. If desired, laboratory work in this field may be undertaken concurrently, the student enrolling for 2 or more units of Chemistry 190 or 200.
1 unit, spring quarter (HUGGINS) W 10
Spring, 14

180. Chemical Literature and Libraries.—The use of chemical literature in research with special consideration of the various abstracts, indexes, bibliographies and reference works as well as the cataloging and classification of material in general and special libraries. Some attention will be given to the historical development of the subject.
3 units, autumn quarter (VAN PATTEN) MWF 4:05
Autumn 13

190. Introduction to Methods of Investigation.—For general character and scope, see under Course 200. Primarily for advanced undergraduates.
(DEPARTMENT STAFF) By arrangement
Autumn, 14 (4 groups); winter, 14 (7 groups); spring, 26 (8 groups); summer, 5 (3 groups)

200. Research and Special Advanced Work.—Properly qualified students are encouraged to undertake work of research, or other advanced laboratory work along lines not covered by the courses already listed, under the direction of any member of the teaching staff with whom arrangement is made.

For all such research and special work students will register for Course 200 (or Course 190 if in undergraduate standing) giving the name of the member of the staff under whom the work is carried on and the number of units agreed upon.
(DEPARTMENT STAFF) By arrangement
Autumn, 36 (9 groups); winter, 39 (9 groups); spring, 46 (10 groups); summer, 27 (7 groups)

203. The Laws and Concepts of Modern Chemistry.—A critical analysis of the origin and development of the fundamental principles of modern chemistry. Designed primarily for graduate students intending to devote themselves to pure scientific research and teaching, but open to any with sufficient training in science. Lectures, consultations, and reading.
3 units, autumn quarter (YOUNG) By arrangement
Autumn, 9

205. The Laws and Concepts of Modern Chemistry.—Continuation of Course 203.
3 units, winter quarter (YOUNG) By arrangement
Winter, 15

209. Photochemistry.—Lecture course.
2 units, spring quarter (LEIGHTON) TTh 9
Spring, 32

211. Seminar in Chemistry.—Discussion of recent advances in theoretical and general chemistry. Open to graduate students and to advanced undergraduates in chemistry with the approval of the faculty in chemistry.
1 unit, every quarter (Department Staff) M 7:30 P.M.
Autumn, 20; winter, 23; spring, 16

213. Theories of Organic Chemistry.
2 units, autumn and winter quarters (Bergstrom) By arrangement
Autumn, 5; winter, 3

215. Thermodynamics and Chemistry.—The application of thermodynamics to various fields in chemistry. Prerequisites: Chemistry 171 and 173.
3 units, spring quarter (Parks) MWF 8
[In alternate years; given in 1928–29]
Spring, 29

217. The Structures of Atoms and Molecules.—Modern theories of atomic and molecular structures and their application to chemical problems.
2 units, spring quarter (Huggins) TTh 11
[In alternate years; given in 1928–29]
Spring, 20

219. The Structures of Crystals.—The results of crystal structure analysis by means of X-rays and the application of these results to problems in chemistry and allied sciences.
2 units, spring quarter (Huggins) TTh 11
[In alternate years; not given in 1928–29]

221. Sorption.—A course dealing with sorption, adsorption, and the chemistry of surfaces.
2 units, autumn quarter (J. W. McBain) TTh 11
Autumn, 14

223. Colloids.—A course dealing with the main principles of colloid science.
2 units, winter quarter (J. W. McBain) TTh 11
Winter, 37

224. Colloids.—A laboratory course to illustrate the chief characteristics of colloids.
2 units, winter and *spring quarters (M. E. McBain) TTh 1:05–4:05
Winter, 3; spring, 2

225. Colloids and Surface Phenomena.—A reading and discussion course dealing with selected topics.
1 unit, spring quarter (J. W. McBain) W 11
Spring, 11

Laboratory Fees.—A charge of $15 per quarter ($5 of which is returnable less bills for breakage and loss of apparatus) is made to students in Courses 1, 2, 3, 10, 11, 12; for 3-unit laboratory courses, the fee is $20 per quarter (of which $10 is returnable); and for all other laboratory courses the fee is $30 per quarter (of which $15 is returnable less bills for breakage and loss of apparatus).

Courses 142 and 144, if for only two units each, carry a deposit of $15 of which $7.50 is returnable. Students who have paid medical fees make a breakage deposit only in these two courses. This amounts to $7.50 for 2 units and $10 for 3 units of credit.

GEOLOGY

Bailey Willis, Professor Emeritus

Eliot Blackwelder, Austin Flint Rogers, James Perrin Smith, Cyrus Fisher Tolman, Professors
Solon Shedd, Curator of the Branner Library
Hubert Gregory Schenck, Assistant Professor
Paul Francis Kerr, Acting Assistant Professor (Summer Quarter)
William Morris Davis, Lecturer (Autumn Quarter)
Siemon Muller, Warren Osborne Thompson, Assistants

The department offers instruction in the science of geology and training in preparation for the profession of geologist, including mining geologist, oil geologist, mineralogist, and paleontologist. At present the fields of work generally open to graduates of the department are those of university teaching and research, state and federal geological surveys, and technical geology in the service of mining, petroleum, and other industries.

Graduation.—For the degree of Bachelor of Arts in geology, sixty units in the department are ordinarily required. The substitution of courses in closely related departments, which are of definite value in geology, may be accepted by the department committee.

Courses which should be completed before admission to the Upper Division, in order that the department requirements for the degree of Bachelor of Arts may be satisfied within two years, are as follows:

Chemistry 1, 2, 3 (or 10, 11, 12); Physics 1; Mathematics A, B, 10, 11 (or their equivalent); Geology 1 (or 1*a*); Civil Engineering 1, 2; German or French (two years). A first course in geology and mineralogy may well be included. (Physical Sciences 1 gives a brief survey of geology, but is not credited as part of the work of the Geology department.)

The courses offered in the Department of Geology are grouped as follows: (*a*) Geology, (*b*) Mineralogy and Petrography, (*c*) Economic Geology, (*d*) Paleontology and Stratigraphy. The following courses are generally required of all major students: Geology 1 or 1*a*, 103, 104, 108, 109, 121, 122, 123, 124, 142, 143, 161, and 163; Civil Engineering 1 and 2; Mathematics 10 and 11, or their equivalent; Physics 1; Chemistry, through Qualitative Analysis; two years of German or French. In addition, it should be noted that Civil Engineering 20 is a prerequisite for Geology 108 and 109.

Students who plan to specialize in paleontology should take suitable courses in biology also. In general, advanced courses should be selected only after consultation with the instructor concerned.

Advanced Work.—Graduate work is offered in physical and dynamical geology, including its historical aspects; in stratigraphic geology and paleontology; in crystallography, mineralogy, and petrography; and in economic geology.

Under the direction of Mr. Blackwelder, advanced students may investigate the nature and origin of sedimentary deposits, physiographic and structural problems, or physical earth history, including physiographic development. The coast and valleys of California and the adjacent states of the Great Basin Province offer exceptional opportunities for the study of

these things in the field. Laboratories available for the use of advanced students are equipped with binocular and petrographic microscopes and other necessary apparatus for work in sedimentation. For study and comparison, and also for original research, graduate students have access to a large collection of modern sediments, rocks, and thin sections, derived from many parts of North America and other countries.

The department is well equipped for research in the stratigraphy and invertebrate paleontology of the Mesozoic and Cenozoic formations of the West Coast, as well as in comparative conchology and general invertebrate paleontology, under the direction of Mr. Smith. The Oldroyd collection of Recent shells, now the best in western United States, affords an especially good opportunity to conchologists.

In stratigraphy the whole of the West Coast Mesozoic and Tertiary is accessible and affords unusual advantages for research. The paleontological collections are especially good in Recent, Tertiary, Cretaceous, Jurassic, and Triassic materials. The Arnold collection of the West Coast Tertiary and Recent material, and the Law, Streator, Oldroyd, and Hemphill collections of shells are open to students, in addition to the general collections in paleontology. Supervised field study is offered to advanced students of Tertiary stratigraphy and paleontology.

The micropaleontologic laboratory, in charge of Mr. Schenck, is equipped with microscopes and collections of Recent and fossil micro-organisms, especially foraminifera.

Mr. Rogers offers special studies in crystallography, systematic mineralogy, and petrography. Goniometers and polarizing microscopes with optical accessories are available in crystallography. In mineralogy, opportunities are especially favorable for work in chemical mineralogy. Much material for investigation is available, and a small private chemical laboratory may be used by advanced students.

In petrography large collections of metamorphic and igneous rocks of the state are available, and abundant opportunities are offered for both field and laboratory work. The petrographic laboratory is well equipped for advanced work.

Advanced and research work in economic geology is carried on under the direction of Mr. Tolman. It includes field investigations, laboratory work, and a study of the literature bearing on special problems of economic geology, especially those relating to water supply, petroleum, ores, and nonmetallic substances.

The field work may consist either of a detailed geological study of a district, or of an investigation of a selected type of mineral deposit. The laboratory work may include chemical, microscopical, and office methods of research.

The laboratory courses in petrography and economic geology will furnish training for those who wish instruction in the methods of microscopic investigation of ores, especially the opaque minerals.

The gold, copper, tungsten, iron, and mercury deposits of California, as well as the important non-metallic deposits of the state, invite research.

The Branner Library, housed in the Geology Building, contains over 10,000 volumes, pamphlets, and maps relating to the geologic sciences. It receives current publications from many parts of the world.

GEOLOGY

[See also Physical Sciences 1, Introduction to Physical Sciences.]

1. General Geology.—The earth, its materials, structure, and internal conditions; the processes which are at work upon and within it; and an outline of its history. Class discussions based upon reading, laboratory, and field study. No prerequisites.

5 units, winter, *spring, and *summer quarters (Muller, Thompson, Blackwelder, Tolman) MTWThF 8
Lab. and field work by arrangement
Winter, 69 (2 sections); spring, 70 (2 sections); summer, 77

1a. Engineering Geology.—This is Geology 1 modified with special reference to the needs of engineers, but open to others. Prerequisites: Elementary Chemistry and Physics. Lectures, laboratory, and field trips.

5 units, autumn quarter (Muller, Thompson) MTWThF 11
Autumn, 95

103. Structural Geology.—The conditions and processes of the earth's interior and their effects upon the material and structure of the earth. Prerequisite: Geology 1 (or 1*a*).

3 units, winter quarter (Schenck) MWF 9
Winter, 19

104. Physiographic Geology.—The operation of surface processes and the origin of land features. Prerequisite: Geology 1 (or 1*a*).

3 units, autumn quarter (Davis) MWF 9
Autumn, 31

108. Field Geology.—Field work with the Stanford Geological Survey. Summer camps are established in the Coast Ranges. During the first half of the summer quarter, the geology of the region reached from the camps is worked out and plotted upon topographic maps and sections. All methods of geologic mapping, where a topographic map is used as the base are taken up. (For second half, see Geology 109; see also Geology 242.) Prerequisites: Geology 103, 121, 142, 143; Civil Engineering 20.

8 units, summer quarter, first half (Tolman, Kerr, Schenck)
Summer, 17

109. Geologic and Topographic Surveying with the Plane Table.—During the second half-quarter each student member of the Stanford Geological Survey prepares a detailed topographic and geologic map of an assigned area, controlled by accurate instrumental surveying. Prerequisite: Geology 108.

7 units, summer quarter, second half (Tolman, Kerr, Schenck)
Summer, 15

111. Advanced Structural Geology.—Prerequisite: Geology 103 and 121.

3 units, spring quarter (Blackwelder) MWF 11
[In alternate years; not given in 1928–29]

112. Advanced Geology.—Special individual work in field, laboratory, or library.

Summer quarter (Tolman) By arrangement
Summer, 4

113. Geomorphogeny.—The origin of topographic features and the interpretation of physiographic history of selected regions. Based on the study of topographic and geologic maps, models, and published reports. Prerequisites: Geology 103, 104, and 143.

3 units, autumn quarter (Davis) [Given in 1929 and alternate years]
Autumn, 9

114. Geologic Literature.—General reading outside of courses, with practice in bibliographic methods and abstracting. Limited to advanced students.
2 or 3 units, each quarter (SHEDD) By arrangement
Autumn, 3; spring, 5

202. Advanced Field Geology.
Summer quarter (KERR, MULLER) [Not given in 1928–29]

207. Sedimentation.—The characteristics and origin of sedimentary deposits. Prerequisites: two years of Geology and Mineralogy; including Petrography.
5 units, autumn quarter (BLACKWELDER) MTWThF 11
Autumn, 11

208. Seminar in Sedimentation.
2 units, spring quarter (BLACKWELDER) W 9–11
Spring, 4

210. Geologic Problems or Thesis.—Investigation of special problems in the laboratory.
Each quarter (BLACKWELDER) By arrangement
Autumn, 2; winter, 3; spring, 3

211. Journal Club.—All graduate students, members of the faculty, and such undergraduates as may be chosen by the staff will meet weekly to consider papers on current research, reviews of new publications, etc. Each student will present at least one paper each quarter.
1 unit, autumn, winter, and spring quarters M 7:30 P.M.
Autumn, 15; winter, 14; spring, 13

212. Geologic Problems or Thesis.—Field or library investigations of special subjects.
Each quarter (BLACKWELDER) By arrangement
Autumn, 3; winter, 1; spring, 1

215. Research in Physical Geology.—For advanced graduates.
Autumn and spring quarters (BLACKWELDER) [Not given in 1928–29]

216. Research in Physical Geology.—Without laboratory work.
Autumn quarter (BLACKWELDER) By arrangement
Autumn, 1

MINERALOGY AND PETROGRAPHY

121. Common Minerals and Rocks.—The study of the more common and important minerals, with a brief treatment of the prominent rock types. An elementary course, with emphasis upon sight determination and simple physical and chemical tests. Prerequisite: Chemistry 3 or 12 or equivalent.
4 units, spring quarter (ROGERS) Lec. WF 11; Lab. ThF 1:05–4:05
Spring, 21

121a. Elementary Mineralogy.—A non-technical course designed to give a general knowledge of the common and widely distributed minerals. Some attention will be devoted to the precious and semi-precious stones. Prerequisite: Elementary Chemistry (either high school or college). Not open to students whose major subject is geology or mining and metallurgy.
3 units, autumn quarter (ROGERS) MWF 11
Autumn, 5

122. Mineralogy.—An elementary study of geometrical crystallography. The systematic study and determination of the more important non-silicate minerals. Open to students who have had Geology 121. Mechanical Engineering 10 (Descriptive Geometry) is recommended.
4 units, autumn quarter (ROGERS) Lec. TTh 11; Lab. MT 1:05–4:05
Autumn, 13

123. Mineralogy.—An elementary study of the optical properties of crystals, with emphasis upon the polarizing microscope as an instrument of research. Systematic study of the important silicate minerals and their determination by all available methods. Prerequisite: Geology 122. Physics 4 is recommended. Limited to twenty students.
4 units, winter quarter (ROGERS) Lec. TTh 11; Lab. TTh 1:05–4:05
Winter, 11

124. Petrography.—Study of hand specimens and thin sections of the principal rock types and mineral deposits. In Courses 122 and 123 the properties or characters of minerals are considered, while Course 124 is primarily concerned with the relations between associated minerals with special reference to their occurrence and origin. Geology 122 and 123 are prerequisites. Limited to twenty students.
5 units, spring quarter (ROGERS)
Lec. TTh 11; Lab. ThF and one period by arrangement, 1:05–4:05
Spring, 12

225. Advanced Mineralogy.—Advanced work in crystallography, mineralogy, or petrography may be undertaken by properly prepared students.
2 to 5 units, autumn and winter quarters (ROGERS) By arrangement
Autumn, 1; winter, 2

226. Advanced Mineralogy.—The same as Course 225, but with no laboratory work.
2 to 5 units, autumn, winter, and spring quarters (ROGERS) By arrangement
Autumn, 6; winter, 3; spring, 1

PALEONTOLOGY AND STRATIGRAPHY

141. Systematic Paleontology.—History and character of fossils. Three lectures and six hours of laboratory work weekly.
4 units, autumn quarter (SMITH, SCHENCK) MWF 10
Autumn, 17

142. Historical Geology.—History and character of geologic formations. Three lectures and six hours of laboratory work weekly.
4 units, winter quarter (SMITH) MWF 10
Winter, 26

143. Historical Geology.—Continuation of Course 142.
4 units, spring quarter (SMITH, SCHENCK) MWF 10
Spring, 16

144. Systematic Conchology.—Special studies in Tertiary and Recent Conchology of the West Coast. One lecture and two afternoons of laboratory work weekly.
2 units, autumn quarter (SMITH) TTh 1:05–4:05
Autumn, 3

145. Tertiary Conchology of California.
2 units, winter quarter (SMITH) TTh 1:05–4:05
Winter, 4

146. Paleobotany of California.
2 units, spring quarter (SMITH) [Not given in 1928–29]

147. General Geology of California.
2 units, autumn quarter (SMITH) TTh 10
Autumn, 30

148. Morphology and Phylogeny of Fossil Invertebrates.
2 units, winter quarter (SMITH) TTh 10
Winter, 2

149. Morphology and Phylogeny of the Ammonoidea.
2 units, spring quarter (SMITH) TTh 10
Spring, 3

150. Micropaleontology.—An introductory study of the foraminifera, marine algae, ostracods, and other microscopic fossils, including fundamentals of laboratory technique. Prerequisites: Geology 141, 142, and 143.
3 units, autumn and *winter quarters (SCHENCK) Lec. W 1:05; Lab. by arrangement
Autumn, 7; winter, 2

151. Micropaleontology.—A study of the more important groups of the foraminifera. Continuation of Course 150.
Winter quarter (SCHENCK) Units and hours by arrangement
Winter, 2

240. Advanced Paleontology.—Research in paleontology, especially invertebrate morphology, and the distribution of faunas. Private work in field and laboratory.
2 to 5 units, autumn, winter, and spring quarters (SMITH) By arrangement
Autumn, 5; winter, 7; spring, 9

242. Field Studies in Tertiary Stratigraphy and Paleontology.—Selected problems are undertaken by advanced students who have completed Geology 108 or equivalent. Geologic sections are examined and fossils collected for laboratory study. For graduates intending to specialize in Tertiary paleontology. Arrangements may be made to live in Summer Geology camp.
7 or 15 units, autumn, winter, spring, and summer quarters (SCHENCK)
Autumn, 1; winter 1; spring, 1; summer, 2

251. Advanced Micropaleontology.—Research in micropaleontology.
Autumn, winter, and spring quarters (SCHENCK) Units and hours by arrangement
Autumn, 2; winter, 3; spring, 4

ECONOMIC GEOLOGY

160. Ground Water Geology.—Motions of surface and subsurface water and their relation to geologic structure. Methods of investigating surface and ground water supply. Prerequisite: Geology 1 or 1*a*.
4 units, winter quarter (TOLMAN) MTWTh 9
Winter, 19

161. Nonmetals.—The occurrence, distribution, origin, and geologic methods of investigation of the nonmetallic substances, including oil and coal. Prerequisites: Geology 121, 142, and 143.
4 units, winter quarter (TOLMAN) MTWTh 8
Winter, 13

163. Ores.—The ore-forming processes, modes of occurrence of the various types of ore bodies, and the structures of the ores. A review of the important ore deposits of the United States and of the world. Prerequisites: Geology 1, 121, and 142.
4 units, spring quarter (TOLMAN) MTWTh 8
Spring, 15

265. Seminar in Ground Water.—Detailed study of the water resources of the Stanford campus and vicinity. Admitted on consultation.
Spring quarter (TOLMAN) By arrangement
Spring, 2

266. Seminar in the Origin and Accumulation of Oil.—A critical study of the literature with reference to the origin and accumulation of oil. Students admitted only after personal consultation with the instructor.
4 units, spring quarter (TOLMAN) TTh 9–11
Spring, 7

267. Seminar in Ore Deposits.—This includes: (1) methods of preparing polished surfaces; (2) microscopic and chemical methods of determination of minerals in polished surfaces; (3) a review of the literature of ore

deposits, especially certain important publications of the United States Geological Survey, and the checking of the results appearing in this literature by a study of suites of specimens from the mines. Prerequisites: Geology 103, 124. (Three lecture and conference periods and three or more laboratory periods.)

6 or more units, winter quarter (TOLMAN) TTh 9–11
Winter, 3

268. Special Courses.—These include: (*a*) study of the literature of some special phase of economic geology, with a thesis; (*b*) field investigation of some mine or mineral district, or nonmetallic substance, or the general economic geology of an assigned area. Without laboratory work.

Winter quarter (TOLMAN) By arrangement
Winter, 1

269. Special Courses.—These include microscopic studies of ores collected during field studies (or microscopic investigation of suites of specimens owned by the University).

Autumn and winter quarters (TOLMAN) By arrangement
Autumn, 1; winter, 3

MATHEMATICS

RUFUS LOT GREEN, Professor Emeritus

HANS FREDERIK BLICHFELDT, WILLIAM ALBERT MANNING, SIDNEY DEAN TOWNLEY, Professors
WILLIAM EDMUND MILNE (University of Oregon), Acting Professor
HAROLD HOTELLING, Associate Professor
GORDON THOMAS WHYBURN (University of Texas), Acting Assistant Professor (Summer Quarter)
CHARLES HENRY HARRINGTON, MILTON LAWRENCE WIEDMANN, Instructors
CHESTER FRANCIS LUTHER, Acting Instructor
HENRY F. PRICE, FRED LAWRENCE WHIPPLE, Acting Instructors (Summer Quarter)
CLEO GARLAND ADELSBACH, LUCILLE COPPLE WIEDMANN, Teaching Fellows
BARRY F. BERING, Assistant in Instruction

The courses offered in Mathematics are arranged in three groups: (I) Courses primarily for Lower Division students; (II) Courses primarily for Upper Division and graduate students; (III) Courses in Astronomy and Geodesy.

I. *Courses Primarily for Lower Division Students.*—These consist primarily of introductory courses in Analytic Geometry, and Differential and Integral Calculus.

Courses 10, 11, 21, 22, and 23 are required of all engineering students. Under Group III, Astronomy and Geodesy, are included courses of especial interest to engineering students, as well as others of a more general interest.

Students intending to graduate with Mathematics as their major subject are required to take Courses 10, 11, 21, 22, and 23, or Courses 41, 42, and 43.

This requirement should be met while students are in the Lower Division, preferably during the first year. Such students are recommended to begin or continue the study of French or German in the first year.

Courses 41, 42, and 43, or Courses 10, 11, 21, 22, and 23 should be taken by students in other departments who need or desire Mathematics above the level of secondary school work. This requirement is presupposed for the course in Statistical Theory.

For the courses in this group the aim is to make the instruction practical in the sense of furnishing thorough drill on fundamental principles and much practice in their application. Emphasis is laid upon accuracy and system in the solution of numerical problems. Students whose training in arithmetical work has been deficient, or who are otherwise inadequately prepared, or who lack aptitude for mathematical study, cannot pursue these courses successfully.

II. *Courses Primarily for Upper Division and Graduate Students.*—Candidates for graduation in Mathematics as their major subject, in addition to the requirements under Group I, must take Advanced Calculus, Higher Algebra, and Analytical Mechanics, together with other courses selected from this group, amounting in all to thirty units of credit in Group II. For a portion of the requirement under this group, certain courses in other departments having a large mathematical content may be substituted.

Graduate students are admitted to any course for which they have suitable preparation. Admission to candidacy for an advanced degree is a function of the Committee on Graduate Study. The department will recommend a graduate to the committee only after a consideration of the preparation, ability, and promise of success of the prospective candidate. It is advisable, before coming to the University, to fill out the appropriate blanks furnished by the Registrar for this purpose, and to receive the approval of the Department of Mathematics upon such candidacy.

Library.—The library facilities are good. The University subscribes for all important mathematical journals and proceedings of learned societies in English, French, German, and Italian, and the library contains complete sets of these and of learned societies of other countries. The more important treatises on mathematical subjects and the collected papers of eminent mathematicians are also in the library.

Fellowships and Assistantships.—Besides University Fellowships open to all graduates, there are two teaching fellowships in Mathematics involving approximately four hours a week, and several assistantships. These positions are filled by graduate students on the basis of ability and training in Mathematics, and in addition upon experience and ability in teaching.

The Teacher's Recommendation.—For a teaching minor in Mathematics, Courses 41, 42, and 43, or Courses 10, 11, 21, 22, and 23, together with nine additional units elected from Group II are required; for a teaching major, additional courses totaling twelve units of credit elected from Group II in addition to the requirements for a teaching minor.

ELEMENTARY COURSES

These courses are provided for students who have not taken them in the preparatory school, or who find it necessary to review them. A fee of $7.50 a quarter is charged for each course, A, B, and C.

A. Algebra.—Fundamental laws, negative and fractional indices, quadratic equations, curve plotting, arithmetic and geometric progressions, the binomial theorem, complex numbers, logarithms. Students who have two entrance units in algebra may not receive University credit for the course.
3 units, autumn and *winter quarters (BERING) MWF 9
Autumn, 24; winter, 11

B. Algebra.—Continuation of Course A.
3 units, winter, *spring, and *autumn quarters (ADELSBACH, BERING) MWF 9, TTh 9, S 8
Autumn, 30; winter, 30; spring, 28

C. Trigonometry.—Elementary course with applications involving logarithmic calculation. Students who have entrance credit in trigonometry may not receive University credit for this course.
3 units, autumn, *winter, and *spring quarters (LUTHER) MWF 11; TTh 11, S 8
Autumn, 34 (2 sections); winter, 36; spring, 1

I. COURSES PRIMARILY FOR LOWER DIVISION STUDENTS

10. Analytical Geometry.—The plotting of curves. Loci. Geometry of the straight line, circle, parabola, ellipse, and hyperbola. Transformation of co-ordinates. Polar co-ordinates. Solid co-ordinate geometry of the plane and straight line, with a brief discussion of the quadric surface. A placement examination will be given during the first week of the quarter. For the convenience of students failing to present entrance credits in algebra, plane and solid geometry, and trigonometry, or found deficient in them in the placement examinations, Courses A, B, and C, listed above, are offered in the department, for each of which a fee of $7.50 a quarter is charged.
3 units, autumn, *winter, and *spring quarters (MILNE, HARRINGTON, LUTHER) MWF 9, 11; TTh 9, S 8; TTh 11, S 9
Autumn, 95 (4 sections); winter, 65 (3 sections); spring, 31

11. Analytical Geometry.—Continuation of Course 10.
3 units, winter, *spring, and *autumn quarters (M. L. WIEDMANN, HOTELLING, MILNE, HARRINGTON, LUTHER) MWF 9, 11; TTh 9, S 8; TTh 11, S 9
Autumn, 35 (2 sections); winter, 65 (3 sections); spring, 57 (2 sections)

21. Differential and Integral Calculus.—Functions. The derivative as the slope of a curve and as the rate of change of a function. Formulas of differentiation. Maxima and minima. Infinitesimals and differentials. Slope of the curves $y = \sin x$, $y = \log x$, and related curves. The area under a curve. Integration. Length of the arc of a curve. Areas in polar co-ordinates. Curvature. Definite integrals. Volume of a solid of revolution. Centers of gravity, fluid pressure, volumes, moments of inertia. Infinite series. Partial differentiation. Prerequisite: Analytical Geometry.
3 units, autumn, *winter, and *spring quarters (MANNING, MILNE, HARRINGTON, LUTHER) MWF 9, 10, 11; TTh 9, S 8
Autumn, 50 (2 sections); winter, 19; spring, 65 (2 sections)

22. Differential and Integral Calculus.—Continuation of Course 21.
3 units, winter, *spring, and *autumn quarters (MANNING, MILNE, HARRINGTON) MWF 9, 10, 11; TTh 11, S 9
Autumn, 54 (3 sections); winter, 40 (2 sections); spring, 21

23. Differential and Integral Calculus.—Continuation of Course 22.
3 units, spring, *autumn, and *winter quarters (MANNING, MILNE, HARRINGTON) MWF 9, 10, 11; TTh 9, S 8; TTh 11, S 9
Autumn, 15; winter, 39 (2 sections); spring, 15 (2 sections)

41. Analytical Geometry.—An elementary survey of co-ordinate geometry and calculus, with applications. Designed to give an understanding of the

fundamental principles of the subject, and an ability to put these principles to practical use. Presupposes elementary algebra and plane trigonometry.
5 units, autumn quarter (M. L. WIEDMANN) MTWThF 9
Autumn, 17

42. Differential Calculus.—Functions. The derivative as slope of curve and as the rate of change of a function. Formulas of differentiation. Maxima and minima. Infinitesimals and differentials. Slope of curve $y = \sin x$, $y = \log x$, and related curves. The area under a curve. The simpler methods of integration. Prerequisite: Analytical Geometry.
5 units, winter and *summer quarters (M. L. WIEDMANN, LUTHER) MTWThF 9
Winter, 20; summer, 10

43. Integral Calculus.—Integration. Length of the arc of a curve. Areas in polar co-ordinates. Curvature. Definite integrals. Volume of a solid inertia. Infinite series. Partial differentiation. Prerequisites: Analytical Geometry and Differential Calculus.
5 units, spring and *summer quarters (M. L. WIEDMANN, PRICE) MTWThF 9
Spring, 17; summer, 4

II. COURSES PRIMARILY FOR UPPER DIVISION AND GRADUATE STUDENTS

112. Analytical Mechanics.—Principles of statics, dynamics, and kinematics.
5 units, spring quarter (M. L. WIEDMANN) MTWThF 11
Spring, 9

119. College Algebra.—The logical basis of the number system, and the theory and solution of equations. For a fuller course in college algebra the student is advised to take Mathematics 119 and 120 simultaneously.
2 units, autumn quarter (HOTELLING) TTh 10
Autumn, 18

120. Determinants, Matrices, and Probability.—An introduction to important branches of algebra.
3 units, autumn quarter (HOTELLING) MWF 10
Autumn, 16

125. The Mathematics of Statistical Inference.—Foundations and derivations of modern statistical devices will be considered with special reference to their connection with probability. It is expected that after completing this course students will be able to understand the works of the leaders of mathematical statistics. Prerequisites: integral calculus, determinants, and probability.
3 units, winter and spring quarters (HOTELING) MWF 10
Winter, 13; spring, 5

130. Advanced Calculus I.
3 units, autumn quarter (BLICHFELDT) MWF 11
Autumn, 26

131. Advanced Calculus II.—Ordinary differential equations.
3 units, winter quarter (BLICHFELDT) MWF 11
Winter, 24

132. Advanced Calculus III.—Partial differential equations of the first order. Green's theorem. Laplace's equation.
3 units, spring quarter (BLICHFELDT) MWF 11
Spring, 18

140. Reading Courses.—Reading courses in various branches of mathematics may, upon consultation, be arranged for students who have special problems or interests.
Any quarter (Blichfeldt, Hotelling, Milne, M. L. Wiedmann) By arrangement with Executive Head of Department
Winter, 7 (3 groups); spring, 9 (4 groups)

150. Differential Equations.—Prerequisite: A working knowledge of integral calculus.
4 units, summer quarter (Whyburn) MTThF 10
Summer, 12

152. Theory of Numbers.—Linear and quadratic congruences. Binomial congruences. Law of quadratic reciprocity. Quadratic forms in two variables. This course is open to all students who have had a short course in the differential calculus.
4 units, autumn quarter (Manning) [Not given in 1928–29]

153. Theory of Groups of Permutations.—The principal theorems of the classical theory will be developed. Manning's *Primitive Groups*, Part 1, will be used as a text. The Theory of Numbers is a prerequisite.
3 units, autumn, winter, and spring quarters (Manning) MWF 8
Autumn, 4; winter, 3; spring, 3

154. Group Theory.
3 units, summer quarter (Manning) TWTh 1:05
Summer, 1

155. Projective Geometry.
5 units, autumn and spring quarters (L. C. Wiedmann) MTWThF 9
Autumn, 7; spring, 1

157. Non-Euclidean Geometry.
4 units, spring quarter (L. C. Wiedmann) MTThF 10
Spring, 16

160. Theory of Equations.—Prerequisite: Differential and integral calculus. Special attention will be given to the Galois Theory of Equations. Dickson's *Modern Algebraic Theories* will be used as a text.
3 units, spring quarter (Manning) [Not given in 1928–29]

205. Theory of Functions of a Complex Variable.—A brief course in transformations and integrals in the complex plane. The calculus is presupposed.
4 units, autumn and winter quarters (Milne) MTThF 8
Autumn, 12; winter, 12

206. Theory of Functions of a Complex Variable.
3 units, summer quarter (Manning) TWTh 11
Summer, 7

207. Calculus of Variations.—The course should be preceded or accompanied by at least a short course on functions of the complex variable.
4 units, spring quarter (Milne) MTThF 8
Spring, 5

208. Differential Geometry.—Curves and curved surfaces in space. Manifolds of higher dimensionality, including the curved space-time of relativity, will be considered in the latter part of the course. Differential equations and determinants are necessary prerequisites. A knowledge of solid analytic geometry is also desirable.
3 units, winter and spring quarters (Hotelling) TTh 10, Th 8 P.M.
Winter, 11; spring, 8

210. Analysis Situs.—The study of properties of figures, such for example as connectivity, which are invariant under deformations and other homeomorphisms. Prerequisite: Determinants.
3 units, winter and spring quarters (HOTELLING) [Not given in 1928–29]

228. Point-Set Theory.
4 units, summer quarter (WHYBURN) MTThF 9
Summer, 16

230. Seminar in Group Theory.
(MANNING) By arrangement
[Not given in 1928–29]

250 Seminar in Continuous Groups.
(BLICHFELDT) By arrangement
Autumn, 1; winter, 1

260. Advanced Reading and Research.—When in the opinion of the department a student is prepared to undertake advanced reading or research not connected with a formal course, such reading or research will be directed by a member of the department.
(BLICHFELDT, MANNING, MILNE, HOTELLING, WHYBURN) By arrangement
Autumn, 3; winter, 1; spring, 2; summer, 6

III. ASTRONOMY AND GEODESY

Courses 50, 51, 165, and 167 are designed especially to meet the needs of students who have time for only a general knowledge of astronomy. Course 161 is intended for students of engineering and geology who desire a working knowledge of practical astronomy. The other courses are intended primarily for students who wish to prepare themselves for astronomical or geodetic work.

50. Descriptive Astronomy.—This course consists of a general survey of the various branches of astronomy, including a study of the celestial sphere, the bodies of the solar system, comets, the fixed stars, and other heavenly bodies.
5 units, winter and *summer quarters (TOWNLEY, WHIPPLE) MTWThF 8, 11
Winter, 30; summer, 15

51. Observational Astronomy.—Study of constellations and various astronomical bodies: Elementary methods of determining latitude and longitude. One afternoon or evening per week. Supplementary to Course 50.
1 unit, autumn, winter, and spring quarters (TOWNLEY) By arrangement
Autumn, 12; winter, 12; spring, 5

161. Practical Astronomy.—The theory and practice of the determination of latitude, azimuth, time, and longitude, with sextant and engineer's transit. Intended especially to meet the requirements of students of civil engineering, geology, and navigation. Courses 21, 22, and 23, and surveying are prerequisites.
3 or 4 units, spring quarter (TOWNLEY) MWF 10
Spring, 6

162. Advanced Practical Astronomy.—A continuation of Course 161. Precise methods of determining time, latitude, etc., by means of the universal instrument.
Any quarter (TOWNLEY) By arrangement
[Not given in 1928–29]

163. Adjustment of Observations.—Theory of the method of least squares, with applications. Credit in Courses 21, 22, and 23 or their equivalent is prerequisite.
3 units, autumn quarter (TOWNLEY) By arrangement
Autumn, 2

164. Geodesy.—Study of the form and dimensions of the earth and the practical methods of geodetic work. Courses 161 and 163 are prerequisites.
3 units, autumn quarter (Townley) By arrangement
Autumn, 1

165. Variable Stars.—Consideration of the different classes of variable stars, methods of observation and construction of light curves. Course 50 is a prerequisite.
3 units, spring quarter (Townley) MWF 8
Spring, 9

166. Celestial Mechanics.—A study of the motions of the bodies of the solar system under Newton's universal law of gravitation. Courses 10, 11, 21, 22, 23, 50, 130, 131, and 132, and 112 or its equivalent are prerequisites.
3 units, spring quarter (L. C. Wiedmann)
Spring, 1

167. History of Astronomy.—A survey of the progress of astronomy from the time of the Greeks to the present. Course 50 is a prerequisite.
3 units, autumn and *spring quarters (Townley) MWF 8
Autumn, 3; spring, 1

PHYSICS

Fernando Sanford, Professor Emeritus
Elmer Reginald Drew, Associate Professor Emeritus

David Locke Webster, Frederick John Rogers, Perley Ason Ross, Professors
Harry L. Clark (Winter Quarter), Karl Kelchner Darrow (Summer Quarter), Acting Professors
Joseph Grant Brown, George Russell Harrison, Associate Professors
Cedric Edward Hesthal, Instructor
Earl Theodore Brown, Harry Engwicht, William Webster Hansen, Seth Henry Neddermeyer, Gerald Leondus Pearson, Jenkins Bennett Rees, Kenneth Berkeley Stoddard, Paul B. Wagner, Assistants in Instruction

The Department of Physics, in addition to the courses listed below, offers very good opportunities for research, especially in X-rays, light, and atmospheric electricity. In X-rays and in light, attention is being focused on measurements of intensities and their relations to theories of radiation.

For X-rays, the equipment includes a vacuum spectrograph and several first-class X-ray spectrometers, apparatus for making and exhausting special X-ray tubes, high-tension alternating-current outfits of various types, and a high-tension direct-current outfit producing exceptionally steady voltages up to 200,000 volts with a power capacity of about two kilowatts.

For researches in light the equipment includes a vacuum grating spectrograph, a six-inch 10-meter concave grating, a six-inch 21-foot concave grating, a four-inch plane grating with lenses for use in the visible, quartz apparatus for photographic photometry in the visible and ultraviolet regions, apparatus for photoelectric photometry, an Anderson wire-exploding outfit, several thermopiles, and other radiometric apparatus for the study of spectral energy distributions in the region 10,000 to 2,000 angstroms.

For photographic intensity measurements in either light or X-rays, there are densitometers of several types.

The library facilities of the department are excellent. The University subscribes to all the important physical journals in English, French, and German, and the library contains complete sets of the more important of these and of the transactions and proceedings of a number of learned societies. The more important treatises on physical subjects in English, French, and German, and the collected papers of a number of the most eminent physicists are also in the library.

Requirements for Graduation.—For graduation in the department the minimum requirement is 60 units of Physics and Chemistry, of which at least 45 units must be Physics. Civil Engineering 30, 31, and 117 and Electrical Engineering 104, 105, 124, and 125 may be counted as Physics courses for the purpose of fulfilling this requirement. Some other courses in related sciences may be counted in full or part value for this purpose on the approval of the Department of Physics. Physics majors are advised to begin their work in Physics with Courses 1, 2, 100 or 101, 111, and 13. Candidates for graduation must offer the equivalent of two years of college work in German, or one year of French and one of German. Students expecting to continue for advanced degrees in Physics are advised to take more than one year of each of these languages. The election of German in the Lower Division is advised for those who have not had the equivalent of two years of college work in this subject.

Advanced Degrees.—In addition to the general requirements laid down by the Committee on Graduate Study, each candidate for an advanced degree in physics will be required to take a general examination before the Department of Physics at some time during the first quarter of his graduate study, the purpose of this examination being to enable the department to form a reliable judgment of his proposed program of study. A written examination on translation of scientific German, or German and French, to determine whether the candidate has a sufficiently good reading knowledge of these languages, shall be included in the general examination for advanced degrees. In addition to this examination, each candidate for the degree of Master of Arts will be required to pass a second examination before the Department of Physics in the quarter in which he takes the degree; likewise each candidate for the degree of Doctor of Philosophy will be required to pass an examination before the Department of Physics within three months previous to his oral examination by the committee appointed by the Committee on Graduate Study. Each of the departmental examinations will be partly written and partly oral. A good reading knowledge of German is required for the degree of Master of Arts, and of both French and German for the degree of Doctor of Philosophy.

The Teacher's Recommendation.—For a minor, the minimum requirement is 28 units of Physics, which should include Courses 1, 2 or 14, 100 or 101, 111, 13, and 200. For a major, the minimum requirement is 45 units of Physics, including these courses. Courses in related subjects may be substituted for some of the Physics courses on the approval of the Department of Physics. It is highly desirable for candidates for the Teacher's Recommendation in Physics to work as Teaching Assistants in the elementary laboratories. The practice teaching requirement of the Department of Education may be met in this way.

Fellowships and Assistantships.—Besides the University Fellowships open to all graduates, there are several assistantships in the department paying $500 per year, and several assistantships at lower salaries.

Laboratory Fees.—Courses with one laboratory period, $3 per quarter; two, $5 per quarter; three, $6 per quarter; but no fees will be charged in Course 230 (Research).

LOWER DIVISION COURSES

These courses are divided into two main groups. One of these includes courses prescribed or recommended for students preparing for biology, chemistry, geology, medicine, and other lines of work not classed as engineering. The other group is designed for engineering students. These groups differ in their emphasis on various topics, and even more in their mathematical prerequisites.

For a detailed statement on prescribed courses, the student is referred to the announcement of his own department. In general, however, the Lower Division courses of interest to non-engineering students are Courses 1, 2, and 3, while those of interest to engineers are Courses 13 and 14. Prospective Physics majors may take courses of either group.

1. Mechanics and Heat.—The lecture hours in this course are used chiefly for problem work on the application of mechanical principles to practical cases, and most of the experimental illustrations of these principles are found in the laboratory. The problems treated are on structures and machines of various kinds, and on the effects of inertia in moving bodies, including sound sources and sound receivers. Heat is treated only briefly, but with special reference to the explanation of heat phenomena by the motions of molecules. The essential purpose of the course is not only to give information on these particular subjects, but also to introduce the student to the methods of exact reasoning needed in advanced scientific work of any kind. Three lectures, either with one laboratory period per week, counting 4 units altogether, or with two laboratory periods, counting 5 units altogether.

4 or 5 units, autumn quarter (Ross, Harrison, Hesthal)
Lec. TThS 8 or 9; Lab. MTWThF 1:05–4:05, TTh 8–12 (any three hours)
Autumn, 152

2. Electricity.—This course is concerned chiefly with problems on the common practical uses of direct currents, and experiments in the lecture room and laboratory illustrating their fundamental principles, including the essential principles of electrostatics, electrolysis, and electromagnetism. The last three weeks are given to brief surveys of alternating current phenomena and of the vacuum tube experiments that prove an electric current to be a stream of electrons.

4 or 5 units (as in Course 1), winter quarter (Clark, Ross, Hesthal)
Lec. MWF 8 or 9; Lab. MTWThF 1:05–4:05, TTh 8–12 (any three hours)
Winter, 139

3. Lenses.—This course is planned for pre-medical students, as preparation for Physiology 105, but may be taken profitably by others who desire a brief survey of the optics of lenses and microscopes and cannot afford time for the more extensive work of Course 111. One laboratory period per week.

1 unit, winter quarter (Hesthal)
Lab. MTWThF 1:05–4:05, TTh 8–12 (any three hours)
Winter, 100

13. Heat.—The course treats the subjects of expansion, temperature and thermometry, calorimetry, change of state, transfer of heat, the properties of gases, and the first and second laws of thermodynamics. Prerequisite: Calculus. Students who have not taken high-school physics are advised to register for 5 units.

4 or 5 units, winter quarter (Brown) Lec. MWF 11; Lab. (one or two periods) MTWThF 1:05–4:05

Winter, 72

14. Electricity.—Magnets magnetic fields, magnetic flux, and magnetic circuits. Electric charges, electric fields, and electric potential. Energy transformations in electric circuits. Electromagnetism and electromagnetic induction. The C.G.S. and practical units of electrical and magnetic quantities. Continued in Course 105. Prerequisite: Course 13. Students who have not taken high-school physics are advised to register for 5 units.

4 or 5 units, spring quarter (Rogers) Lec. MWF 11; Lab. (one or two periods) MTWThF 1:05–4:05

Spring, 71

30. Elementary Meteorology.—A course on the weather and its elements. The treatment will involve only simple mathematics and physics. Suited to students of climatology, aëronautics, or engineering, and to general students who wish to learn something of the subject but are not prepared for Course 130.

3 units, winter quarter (Brown) Lec. MWF 8

Winter, 5

UPPER DIVISION COURSES

100. Modern Physics.—A course on the discoveries of the last few decades on the nature of matter and energy. Specific topics covered are: the properties of electrons and atomic nuclei; electrons and nuclei as the constituents of atoms, with current theories of atomic structure; the wave theory of light and the electrical nature of light waves; the reactions between electrons, light waves, and atomic collisions, leading to the theory of quanta; the nature of space and time. Prerequisite: Course 2 or 14.

3 units, spring quarter (Webster, Huggins, Harrison, Ross) Lec. TThS 8

Spring, 133

101. Modern Physics.—A summer course given by a visiting professor, similar in its general nature to Course 100 but differing in content and viewpoint.

3 units, summer quarter (Darrow) Lec. MWF 11

Summer, 38

105. Electrical Measurements.—Precise measurements of current, potential, resistance, electric power, inductance, capacitance, and the magnetic properties of iron. Lectures on the foregoing topics and on electric oscillations and resonance, electrical discharges, cathode rays, and electron tubes. The course will include a review of fundamental principles of electricity and magnetism. Prerequisite: Course 2 or 14.

5 units, autumn, spring, and summer quarters (Rogers) Lec. MW 11; Lab. (three periods) MTW 1:05–4:05

Autumn, 7; spring, 2; summer, 6

106. Ions and Electrons.—General principles of the theory of electrons. Electrical discharges. Ionization, recombination, and conductivity of gases. Corpuscular and X-radiation. Prerequisite: Course 105.

5 units, winter quarter (Rogers) Lec. MWF 10; Lab. WTh 1:05–4:05

[In alternate years; not given in 1928–29]

107. Electron Tubes and Oscillating Circuits.—Theory and uses of thermionic tubes as rectifiers, detectors, amplifiers, and oscillators. Prerequisite: Course 105.

4 units, summer quarter (ROGERS) Lec. TTh 10; Lab. WTh 1:05–4:05
[In alternate years; given in 1928–29]

Summer, 3

109. Advanced Electricity.—The objects of this course are: (1) a thorough review of the various electrical and magnetic quantities, their fundamental relations, and the units of all these quantities in the three systems of units; (2) a study of the elements of varying and alternating currents; (3) a study of the elements of oscillating currents and electric waves; (4) applications of Poynting's theorem. Prerequisites: Course 105, Calculus, and preferably theoretical mechanics.

5 units, autumn quarter (ROGERS) Lec. MTWThF 9

Autumn, 1

110. Wave-Motion and Sound.—About one-third of the time is given to wave-motion. The work on sound deals with the production and propagation of sound, resonance, interference, musical instruments, hearing, the phonograph, the radiophone, and the acoustics of auditoriums. Two lectures and two or three laboratory periods per week. Prerequisite: A year of college physics.

4 or 5 units, spring quarter (BROWN)
Lec. TTh 8; Lab. (two or three periods) by arrangement
[In alternate years; given in 1928–29]

Spring, 7

111. Light.—This course deals primarily with refraction, dispersion, interference, diffraction, and polarization of light. Designed especially for Physics and Geology majors, but open to others. Two lectures and two or three laboratory periods per week. Prerequisites: Courses 1 and 2 or an equivalent. Students who have taken Course 110 will be able to cover about one-third more ground.

4 or 5 units, autumn quarter (BROWN)
Lec. TTh 8; Lab. (two or three periods) by arrangement

Autumn, 9

120. Optical Instruments.—Elementary geometrical optics of the prism, the thick lens, and combinations of lenses, as used in optical instruments. Theory of the diffraction grating and interferometer, resolving power of instruments. Prerequisites: Course 111 and Calculus. Three lectures and one laboratory period per week.

4 units, spring quarter Lec. MWF 9; Lab. by arrangement
[In alternate years; not given in 1928–29]

121. Physical Optics.—Lectures and assigned reading on line spectra in emission and absorption and their relation to atomic structure, magneto-optics, fluorescence, band spectra, the photo-electric effect, and the laws of temperature radiation, with comparison of the classical and quantum theories of radiation. Laboratory work with spectrometer, interferometer, polarimeter, grating and prism spectographs, and spectro-radiometer. Prerequisite: Course 120.

4 units, spring quarter (HARRISON) Lec. TTh 11; Lab. ThF 1:05–4:05
[In alternate years; not given in 1928–29]

123. X-Rays.—An introductory course, covering methods of producing and measuring X-rays, the main features of their spectra and the basic laws of their emission, scattering, reflection, absorption, and fluorescence. The laboratory work in this course and 124 is planned to include training in research

methods. It consists primarily of experimental studies of a few phenomena chosen by the students, using such apparatus as may be at hand or made by them; and each problem includes the planning and assembling of the apparatus, as in a research problem. There also will be some opportunity for contact with actual research problems, through assisting in the X-ray research laboratory. Prerequisite: Course 100 or 101.

4 units, autumn and summer quarters (Ross) Lec. MW 10; Lab. (two periods) by arrangement

Autumn, 13; summer, 4

124. X-Ray Spectra.—A continuation of Course 123, with special attention to X-ray spectra and such aspects of their relation to atomic structure as can be handled with a first course in Calculus. Prerequisites: Course 123 and Calculus.

4 units, winter quarter (Ross) Lec. MW 10; Lab. (two periods) by arrangement

Winter, 10

130. Meteorology.—A course on the physics of the air. Textbook, lectures, and problems. Prerequisite: a year of college physics.

5 units, winter quarter (Brown) Lec. MTWThF 8

[In alternate years; not given in 1928–29]

131. Atmospheric Electricity.—The potential gradient of the earth's electric field; ionization of the atmosphere; the thunder storm; the penetrating radiation; theories. Prerequisite: Course 2 or 14. Course 106 and ability to read French or German are desirable.

3 units, spring quarter (Brown) Lec. MWF 8

[In alternate years; not given in 1928–29]

140. History of Physics and Physical Sciences up to the opening of the nineteenth century. A course designed especially for students preparing for high-school or college teaching, or for research in physics. Each member of the class is assigned a particular field and he is expected to prepare and present lectures on the history of this field. Prerequisite: a year of college physics.

2 units, autumn and *summer quarters (Brown) By arrangement

[In alternate years; given in 1928–29]

Autumn, 3; summer, 5

141. History of Physics during the nineteenth century and up to the present. A continuation of Course 140.

2 units, winter and *summer quarters (Ross) By arrangement

[In alternate years; given in 1928–29]

Winter, 3; summer, 10

COURSES PRIMARILY FOR GRADUATES

200. Teacher's Course in Physics.—The history of the development of present-day methods of teaching physics, and practice in outlining courses for use in the high school. Two lectures and one library period per week. Prerequisite: a year of college physics.

3 units, spring and *summer quarters (Brown, Rees) By arrangement

Spring 4; summer, 10

201. Literature of Physics.—An intensive study of the literature of special topics in physics. This course is intended for two classes of students: (*a*) those who expect to engage in research and wish to become familiar with the present status of the subject of the proposed research; and (*b*) those who are preparing for the teaching of physics and wish to acquire facility in

working up a subject for class use. The work consists chiefly in the preparation and presentation of reports upon the topics studied. Prerequisite: 25 units of college physics.

Any quarter (Any Member of the Department) By arrangement
Autumn, 6 (2 groups); winter, 14 (3 groups); spring, 6 (3 groups); summer, 1

204. Introduction to Mathematical Physics.—A preliminary survey of some of the mathematical principles, theorems, and equations most widely applicable in physics, with special emphasis on their physical interpretation and the methods of reasoning needed for independent work in mathematical physics. The course will be conducted on an independent study basis, the lecture hours being used only for conferences on questions arising in such study. Prerequisites: Courses 100 or 101, 105, 112, either 110, 121 or 124, differential equations, and Civil Engineering 117.

5 units, autumn quarter (Webster) MWF 10
Autumn, 1

205. Electrical Theory.—Mathematical theory of static electric and magnetic fields, studied as in Course 204. Prerequisites: Course 204 and Electrical Engineering 104 and 105.

5 units, winter quarter (Webster) MWF 10
[In alternate years; not given in 1928–29]

206. Electromagnetic Theory.—Mathematical theory of electromagnetic waves. Prerequisite: Course 205.

5 units, spring quarter (Webster) MWF 10
[In alternate years; not given in 1928–29]

211. Thermodynamics.—Extended discussion of the second law of thermodynamics and its application to physical and chemical transformations. Prerequisites: Calculus and Course 13.

3 units, autumn quarter By arrangement
[In alternate years; not given in 1928–29]

212. Kinetic Theory.—The properties of gases deduced from the mechanics of molecules, the ideal gas and real gases, entropy and probability, quantum theory of specific heats, rarefied gases, Brownian movement, change of state, cohesion phenomena. Prerequisites: Courses 13 and 112.

5 units, spring quarter (———) By arrangement
[In alternate years; not given in 1928–29]

214. Spectral Series and Atomic Structure.—Lectures and discussion on current theories of line spectra and atomic structure. One or two laboratory periods may be taken at the option of the student, giving practical experience in the spectroscopy laboratory on the measurement of spectral lines and line intensities. Prerequisites: Courses 121 or 124, 206, and 212.

3, 4, or 5 units, spring quarter (Harrison) Lec. MWF 10; Lab. by arrangement
[In alternate years; given in 1928–29]
Spring, 7

215. Seminar in Spectroscopy.—Discussion of the application of the quantum theory to the origin of spectral lines and the light it sheds on the structure of the atom.

Any quarter (Harrison) By arrangement
Autumn, 6; winter, 8; spring, 5

216. Seminar in X-Rays.—Discussion and reports on the progress of current researches in the X-ray laboratory and on articles in current literature of interest to research workers.

Autumn, winter, and spring quarters (Webster, Ross) By arrangement
Autumn, 1; winter, 3; spring, 5

217. Advanced Theoretical Physics.—After an introductory study of the wave-theory of light, this course deals with wave-mechanics and some of the other concepts and methods recently introduced into atomic theory.
3 units, summer quarter (DARROW) MWF 10
Summer, 5

220. Journal Club.—Oral reports on the current literature of physics by department faculty and graduate students.
Every quarter W 4:15–6:00

230. Research.—Under this head may be included all work on experimental or theoretical problems in research, as distinguished from the independent study of non-research character listed as Course 201. It is the policy of the Department of Physics to advise against registration for more than five units of research in any one quarter.
Units and quarter by arrangement (ANY MEMBER OF THE DEPARTMENT)
Autumn, 10 (2 groups); winter, 11 (2 groups); spring, 12 (3 groups); summer, 6 (2 groups)

SCHOOL OF SOCIAL SCIENCES

EDWIN ANGELL COTTRELL, HENRY WALDGRAVE STUART, LEWIS MADISON TERMAN, PAYSON JACKSON TREAT, MURRAY SHIPLEY WILDMAN (*Chairman*), *Executive Committee*
WALTER GREENWOOD BEACH, *Adviser*

The School of Social Sciences has been formed (*a*) to facilitate the work of students who desire to study in several related fields without meeting the requirements for a degree in any one department; (*b*) to afford a convenient organization for the conduct of courses in subjects which do not lie wholly within the scope of any particular department; (*c*) to make possible a closer correlation of the work of the several departments included in the School.

The faculty includes all members of the departments of Economics, History, Philosophy, Political Science, Psychology, and the divisions of Journalism and Sociology, and the instructors in Citizenship, together with certain professors chosen from the departments of Education, Food Research, Law, Language, and Literature, who offer courses of instruction in subjects related to the Social Sciences.

UNDERGRADUATES

Major Students.—In order to become a major student in the School of Social Sciences one must have obtained 90 units of university credit with a grade-point average of 1.5, provided that for majors in any division where specific courses amounting to 30 units or more are required this standard of scholarship may be waived.

For the degree of Bachelor of Arts in this School 80 units are required in courses offered by the departments of Economics, History, Philosophy, Political Science, Psychology, and the divisions of Journalism and Sociology, together with the related courses offered in the other departments mentioned above. A part of this requirement will, under existing regulations, be met while the student is in the Lower Division.

The following courses of study (described in the announcements of the several departments in which they are offered) are specifically required for graduation in the School:

Economics 1 (Elements)	5 units
Economics 2 (Sociology)	5 units
History 10, 11, and 12 (European) or History 16 and 17 (English)	9 units
Philosophy 2 (Ethics)	5 units
Political Science 1 (Introduction)	5 units
Psychology 51 (General Psychology)	5 units
Total	34 units

[A course in statistical methods is strongly advised. See Economics 6 (5 units), Education 185 (4 units), or Psychology 60 (5 units). The modern language requirements of the Lower Division must be satisfied as early as possible by all major students in the School who enter from other institutions.]

Undergraduates may enroll as major students in any one of the divisions of the School in the same manner as in a regular department of the University, subject to the condition that they shall satisfy the specific requirements of the School for graduation. The divisions of the School may arrange groups of courses constituting "Teaching Majors or Minors" in their respective subjects in the same manner as departments of the University, but no such majors or minors will be granted in "Social Sciences" or under other designation by the School as such.

GRADUATE STUDENTS

Graduate students who have completed the undergraduate requirements of the School of Social Sciences or of any one of the five constituent departments, or an approximate equivalent of these, may be enrolled in the School as major students and may become candidates for the degree of Master of Arts or Doctor of Philosophy. Graduates of a constituent department or division or of another institution must, however, have completed the specific undergraduate requirements of the School before an application for candidacy for an advanced degree can be approved. Candidates for these degrees shall comply with all the general requirements of the University specified for the degree sought. The entire time of candidates for advanced degrees will as a rule be devoted to studies within the constituent and allied departments of the School, but in particular cases courses or lines of study may be elected in other departments of the University when incidental to and comprised within the general plan of work constituting the candidates' "major in Social Sciences."

The primary function of the School, except in the case of students in the "divisions" of the School, is to assist students in the investigation of problems which may not admit of satisfactory treatment from the point of view of any one of the several social sciences. Accordingly, only such graduate students as are looking forward to the preparation of a thesis or dissertation upon a problem of the kind in question will be enrolled as major students in the School or approved as candidates for advanced degrees. Enrollment will be made with the Chairman of the Executive Committee. Continuance of a graduate student in the School will depend upon the approval of a special standing committee consisting in each case of the Adviser of Graduate Students and a representative designated by each department of the School, constituent or allied, whose province, in the judgment of the Chairman of the Executive Committee, the proposed problem more directly touches. This special committee shall have a general oversight of the student's entire work. It shall pass upon the competence of the candidate's knowledge of French and German and upon the program of studies to be submitted to the Committee on Graduate Study in connection with the application for candidacy for the advanced degree. Application for candidacy must have the final approval of the Chairman of the Executive Committee of the School. The completed program of studies will constitute a "major in Social Sciences" for the degree of Doctor of Philosophy. In view of the composite character of this major, candidates will not be permitted to enroll for a minor in a particular department of the University or division of the School, and the School will regularly recommend to the Committee on Graduate Study in behalf of its candidates for the doctorate that the normal requirement of a specified minor subject, or subjects, be waived. Such candidates, before their oral examination for the degree, must

pass written examinations of a comprehensive character in the subjects included in the specific undergraduate requirements.

In the case of students majoring in the "divisions" of the School the requirements for higher degrees shall be the same as for majors in independent departments.

CITIZENSHIP

Edgar Eugene Robinson (History), Director
Henry Stow Anderson (Economics), Assistant Director
Walter Greenwood Beach (Social Science), Harold Chapman Brown (Philosophy), Edwin Angell Cottrell (Political Science), Eliot Jones (Economics), Eliot Grinnell Mears (Graduate School of Business), Lewis Madison Terman (Psychology), Advisory Committee
Reginald Bell, Delbert R. French, James K. Hall, Edwin Everett Wilson, Instructors
Edward W. Harrington, John Ralph Nichols, Acting Instructors

1–3. Problems of Citizenship.—A general introductory course required of all students in their first year. Designed to present the salient features in the bases and background of present-day society, to consider the place of education in modern life and the political equipment of the citizen, and to examine in detail the fundamental political, social, and economic problems of the American people.

Attention is given the following: (I) Problems of Approach and Method, involving the presentation of the evolutionary conception of society and the preparation of mankind for a reasoning course of action; tests of the progress of man and the emergence of a scientific attitude and a scientific method, together with the development of social science; and, finally, a survey of the sources of information and an examination of the use and value of opinion. (II) Problems of Control and Support, involving an examination of political democracy, its origin, growth, and present-day manifestations, and the place and scope of constitutional government; the cost of government, the sources of its support, and the wide extension of governmental activities; the institution of private property and the modern wage system; and, finally, the control of industry. (III) Problems of Liberty and Co-operation, beginning with an examination of American liberty and the protection of individual rights, including, particularly, the pressure of the movement for liberalism and the argument for revolution; the movements of peoples, emphasizing the problems of race, and, particularly, social conflicts within the United States; the growth of modern imperialism, with emphasis upon the foreign policies of the United States; and, finally, the growth and development of international relations.

Lectures by various members of the faculty and sections in charge of instructors in Citizenship.

4 units, autumn, winter, and spring quarters T 10 (and three hours by arrangement)
Autumn, 512 (18 sections); winter, 510 (18 sections); spring, 490 (16 sections)

ECONOMICS

Murray Shipley Wildman, Walter Greenwood Beach, Eliot Jones, Albert Conser Whitaker, Professors

William Leonard Crum, J. Hugh Jackson, Professors (Graduate School of Business)

Herbert J. Davenport (Cornell University), Acting Professor (Summer Quarter)

Joseph Stancliffe Davis, Alonzo Englebert Taylor, Directors of the Food Research Institute

John Bennet Canning, Associate Professor

Elmer Daniel Fagan, Acting Associate Professor

Henry Stow Anderson, Bernard Francis Haley, Charles Nathan Reynolds, Assistant Professors

Margaret Frances Milliken, Carl Burton Robbins, Wallace Wright, Instructors

Walter Edwards Beach, Acting Instructor (Summer Quarter)

Holbrook Working, Lecturer

Homer Paul Balabanis, Frederick Allen Conrad, Ray Franklin, Milton Fehling, Clausin Dennis Hadley, Dudley Henry Harkleroad, Arthur Robert Himbert, George Carpenter Ingelow, Richard Tracy Lapiere, William Metzler, Towne Joseph Nylander, John Young Springer, Assistants in Instruction

Nature and Purpose.—Instruction in the department is not confined to the subject of Economics as commonly defined, but includes, in the Division of Accountancy, the special training in Economics appropriate for the professional practice of both private and public accountants, and, in the Division of Sociology, subject-matter usually offered in departments of sociology. In the conduct of all the courses, however, the economic factors are emphasized and their importance to our social institutions is developed. The primary purpose of the instruction is to discover the elements of a sound public policy rather than to train for a vocation.

Library.—The University Library is well provided with material in all subjects dealing with Economics, as well as in the field of business education. The Hopkins Railway Library affords invaluable material for investigation and study of transportation problems in great variety. There are special collections of works on the institutions and commerce of Brazil, Spanish America, and the Orient, as well as on the development of California and the Pacific Coast. California and its chief port, San Francisco, afford an abundance of material for the study of topics in frontier industrial development, foreign trade, labor, and immigration.

Advanced students in Economics will be given opportunity to study in co-operation with the Food Research Institute and will have access to the Hoover Collection. These sources will afford valuable material for the study of certain problems connected with the World War and the economic collapse of Europe.

Graduation.—To arrange a program of study leading to the degree of Bachelor of Arts in Economics a student should consult with his departmental and division advisers in order that his program of work may be

adapted to his special needs or interests. In making such a program at least a fourth of the required 180 units must be selected from courses offered in this department.

In addition to courses given in this department, certain others offered in Political Science, History, Law, and Philosophy will be found helpful and should be included in the student's program.

Course 1 (Elementary Economics) and Courses 100*a* and 100*b* (Principles of Economics) are required of all candidates for graduation in Economics. (For additional requirements in the Division of Accountancy and the Division of Sociology see the statements following the list of courses.)

Advanced Degrees.—The work available to advanced students is not limited to that described in the list of courses below. The members of the department, with the assistance of certain members of allied departments, undertake to supervise a wide range of individual advanced study and research. The following groups of subjects are among those most fully developed: (1) economic theory and the history of economic thought; (2) railways and other public utilities; (3) money, banking, and prices; (4) corporations, trusts, and investments; (5) public finance; (6) accounting and auditing—theory and procedure; (7) certain branches of sociology; (8) certain fields of agricultural economics (with the assistance of the Food Research Institute); and (9) statistical theory and method (with the assistance of certain members of the departments of Mathematics, Psychology, and Education, of the Food Research Institute, and of the Graduate School of Business).

Those who contemplate becoming candidates for higher degrees should write in advance of registration to the executive head of the department for information about the department requirements.

Teacher's Certificate.—To obtain a teacher's certificate with the major subject in this department, a student will be required to secure credit for 45 units of work in Economics. For a certificate with a minor in this department, credit for 25 units is required. The department does not offer either a teaching major or a teaching minor for the junior high school certificate.

Teaching Assistantships.—The department annually nominates a number of graduate students for appointment as teaching assistants. The stipends of appointees vary from $750 to $900 per year (three quarters). The service expected consists of conducting one section of an elementary course during each quarter. It is our experience that able and well prepared students can carry on this instruction and, at the same time, pursue satisfactorily graduate work on their own account. Applicants for these appointments for an ensuing year should address their requests to the executive head of the department not later than the last day of February. The applications should be accompanied by a complete, authenticated transcript of academic record (graduate and undergraduate) and should name several persons qualified to speak of the applicant's fitness for appointment.

COURSES OPEN TO LOWER DIVISION STUDENTS

1. Elementary Economics.—This is a brief study of problems involving the production, exchange, and use of wealth. An attempt is made to give the student an approach to the economic issues of the day with an intelligent

appreciation of the factors which make for sound public policy. To become a major student in the department a student must either have completed this course or be registered for it in the quarter in which he enters the department. Prerequisite: Completion of the course in citizenship or full exemption therefrom.

5 units, autumn, *winter, *spring, and *summer quarters (W. E. Beach, Balabanis, Conrad, Ingelow, Franklin, Fehling, Metzler, Nylander)
Autumn, 166 (4 sections); winter, 153 (4 sections); spring, 112 (4 sections); summer, 42

3a. Elements of Accounts.—The equation of modern accounts; theory of debit and credit; classification of accounts; procedure of recording transactions in modern accounting devices; preparation of balance sheets and loss and gain statements. No prerequisites. Sections limited to 40 students.

5 units, autumn, *winter, and *spring quarters (Balabanis, Hadley, Harkleroad, Himbert, Wright)
Autumn, 77 (2 sections); winter, 85 (2 sections); spring, 114 (3 sections)

3b. Elements of Accounts.—Conclusion of Course *3a*. Prerequisite: Course *3a* or the equivalent. This course should be taken by those expecting to enter Course 120, and is a prerequisite to all other courses in accounting except Course 4. Sections limited to 40 students.

5 units, autumn, *winter, and *spring quarters (Springer, Himbert)
Autumn, 31; winter, 42; spring, 74 (2 sections)

4. Elements of Accounts.—A briefer course within the scope of Courses *3a* and *3b* intended for those who expect to take only one course in the subject. Special attention is given to the engineer's interests in accounts. This course will not ordinarily serve, in place of *3a* and *3b*, as a prerequisite to other courses in accounting.

5 units, autumn, *winter, *spring, and *summer quarters (Wright, Jackson)
Autumn, 21; winter, 28; spring, 29; summer, 13

5. Elements of Cost Accounting.—A general survey course of cost accounting procedures to be applied to both manufacturing and merchandising concerns. Especial attention is given to standard costs and to the differences between job and process cost systems. Prerequisites: Economics *3a* and *3b* or their equivalent.

5 units, winter quarter (Robbins)
Winter, 76

6a. Introduction to Statistical Methods.—A study of elementary statistical methods appropriate for dealing with problems in the social sciences and business. Emphasis is given to the critical examination of data, to the defining of statistical units, to the theory of classification, and to the properties and appropriate uses of the commoner averages and measures of dispersion. Some attention is also given to the simpler phases of index numbers and linear correlation. No prerequisites. Sections limited to 35 students.

5 units, autumn and *winter quarters (Milliken)
Autumn, 28; winter, 31

6b. Introduction to Statistical Methods.—A study of some of the problems of analysis of time series, including measurement of secular trends, seasonal fluctuations, and cyclical fluctuations. Prerequisite: Course *6a* or the equivalent. Sections limited to 35 students.

5 units, spring quarter (Milliken)
Spring, 21

24. Problems of Agriculture.—A study of the economic forces and institutions with which the farmer is concerned. Prerequisite: Course 1.

5 units, autumn quarter (Anderson)
Autumn, 88

46. Economic History of the United States.—A general historical survey of the economic development of the United States from the Colonial period to the present. The subject matter of the course includes the tariff, commerce and manufactures, currency and banking, the South and slavery, the financial management of the government, the labor movement and immigration, and the conservation of national resources.

5 units, autumn quarter (NYLANDER)
Autumn, 41

COURSES OPEN TO UPPER DIVISION AND GRADUATES ONLY

100a. Principles of Economics.—A review of the principles of economics. Required of major students in the Department of Economics and open only to them, to students in the School of Social Sciences, and to graduate students. Prerequisite: 135 units.

5 units, autumn, *winter, *spring, and *summer quarters (ANDERSON, JONES, MILLIKEN, WILDMAN, ROBBINS)
Autumn, 109 (3 sections); winter, 47; spring, 31; summer, 25

100b. Principles of Economics.—A continuation of the work begun in 100*a*; required for graduation in the Department of Economics. Prerequisite: Course 100*a*.

5 units, autumn, *winter, *spring, and *summer quarters (ANDERSON, ROBBINS, WRIGHT, WHITAKER)
Autumn, 27; winter, 94 (3 sections); spring, 90 (3 sections); summer, 20

101. Labor Problems.—A general course. The topics considered include the following: the rise of the wage-earning class, the industrial revolution, unemployment, woman and child labor, wages, collective bargaining, labor motives, and cultural aspects of labor life.

5 units, spring quarter (REYNOLDS)
Spring, 156

106. Foreign Exchange.—The settlement of debts arising in foreign trade, banking for the foreign trade, international money markets and bill markets, etc.

4 units, autumn and *spring quarters (WHITAKER)
Autumn, 72; spring, 106

107. Railway Transportation.—Historical account of railroad transportation; rates and rate-making; development of railroad systems; state and federal legislation; decisions of the commissions and of the courts; government ownership and operation.

5 units, autumn quarter (JONES)
Autumn, 128

108. Money and Banking.—The elements of monetary theory; the laws of coinage, legal tender, and credit; the history and principles of banking.

5 units, autumn quarter (WILDMAN)
Autumn, 185

109. Valuation.—The valuation of the operating assets, of the liabilities, and of the proprietary interests in private enterprises; the relating of anticipated outlay costs of operation to the problem of present valuation. Emphasis is given to the theories of depreciation, depletion, and obsolescence of assets and to the valuation of goodwill. Prerequisite: Course 3*b* or the equivalent.

5 units, winter quarter (CANNING)
Winter, 32

110. Public Finance.—A general course dealing with the history and theory of public expenditures, national, state, and local budgets, methods of

securing efficiency in the disbursements of public moneys, public debts, and war finance.

5 units, autumn and *spring quarters (FAGAN)
Autumn, 50; spring, 135

111. Taxation.—A general treatment of the principles and practice of taxation, with special reference to American methods and conditions.

5 units, winter quarter (FAGAN)
Winter, 40

[**Business Law.**—See *Announcement of the School of Law.*]

119. Accountancy of Investment.—Methods of valuing income-bearing properties and securities on the basis of a rate of interest, and of finding the rate of interest yielded on investments. Depreciation and sinking funds. The student's work will consist largely in the solution of assigned problems. Advanced mathematics not required.

4 units, autumn and *spring quarters (WHITAKER)
Autumn, 58; spring, 79

120. Corporation and Trust Finance.—Elementary survey of corporation law; the organization and management of corporations and combinations; the corporation's securities, the stock market and stock speculation; financial policy; promotion, underwriting, and reorganization. Prerequisite: Grade-point rating 1.25 or better in last published *Directory.*

3 units, winter and *summer quarters (ROBBINS, WHITAKER)
Winter, 170; summer, 22

128. Cost Analysis.—The nature of enterprise costs; classification of costs; modes of allocating cost to items of product; the problems of joint cost and of unused capacity; the limitations of cost accounts. Prerequisite: Course 5 or the equivalent.

5 units, spring quarter (CANNING)
Spring, 33

130. International Trade.—A survey of the theory of International Trade and a study of the commercial policy of leading countries.

5 units, winter quarter (INGELOW)
Winter, 228

148. Federal Tax Procedure.—The accounting procedure appropriate for determining amounts of taxes payable under the provisions of the Federal Revenue Acts of 1921, 1924, and 1926. Prerequisites: Course *3b* or the equivalent, and consent of the instructor.

5 units, autumn quarter (ROBBINS)
Autumn, 27

149. Capital and Income.—A critical review of the economists', the lawyers', and the accountants' views of the nature of capital and income. Based on Irving Fisher's *The Nature of Capital and Income.* Prerequisite: Course 100*a* or the equivalent.

5 units, spring quarter (CANNING)
Spring, 64

150. International Payments.—A study of trade between countries with special reference to the movement of gold and its consequences for prices and business.

5 units, summer quarter (W. E. BEACH)
Summer, 46

165. Statistical Theory.—Discussion of selected topics in the application of statistical methods to the study of specific economic problems. Special

emphasis is placed upon the appropriateness of particular methods and validity of the results. Acquaintance with elementary statistical methodology is presupposed.
3 units, winter quarter (CRUM)
Winter, 12

COURSES PRIMARILY FOR GRADUATE STUDENTS

201. Graduate Seminar.—Open only to candidates for higher degrees who report upon dissertations in progress from week to week.
Autumn, spring, and summer quarters (WILDMAN) By arrangement
Autumn, 3; spring, 4; summer, 5

202. Seminar in Transportation.—This seminar is designed for advanced students.
Autumn, winter, and spring quarters (JONES) By arrangement
Autumn, 1; winter, 1; spring, 6

205. Seminar in Economic Research.—Open to qualified students.
Autumn, winter, and spring quarters (DAVIS) [Not given in 1928–29]

206. Value and Distribution.—Primarily for graduate students but open to such undergraduates as have had Course 100*ab* or its equivalent.
4 units, summer quarter (DAVENPORT)
Summer, 18

208a and b. Seminar in Public Finance and Taxation.—This course will afford opportunity for independent reading and research in the general field of public finance. Periodic conferences will be held for discussion and criticism of the results of each student's investigations. Wide freedom of choice of topics will be permitted, subject only to the limitation of available library and field material.
208a. spring quarter (FAGAN) By arrangement
208b. winter quarter (FAGAN) [Not given in 1928–29]
Spring, 4

210. Accounting Problems.—Methods appropriate for recording and reporting divers classes of transaction to which anyone is likely to be a party but which constitute the principal business of few persons. Such transactions as those between corporation and underwriter, principal and broker, bankrupt and referee and trustee in bankruptcy, trustee and beneficiary, insurer and insured (following a loss), etc., are discussed. Liberal use is made of problems set in recent examinations for Certified Public Accountants. Prerequisite: consent of the instructor.
5 units, autumn quarter (CANNING)
Autumn, 8

212. Banking.—The operation of the banks under the Federal Reserve Act and a comparison of American with European practice.
5 units, summer quarter (WILDMAN) [Not given in 1928–29]

213a and b. History of Economic Thought.—A study of the development of economic theories from ancient times to the present. The first half of the course will cover the period previous to Adam Smith. Either half may be taken without the other. Seniors may be admitted with the consent of the instructor.
213a. 4 units, autumn quarter
213b. 4 units, winter quarter (HALEY)
Autumn, 17; winter, 26

214. Investments.—A study of the issues of national, state, and municipal governments, of railway, industrial, and irrigation companies from the investor's point of view, and the organization and methods of bond and brokerage houses.
3 units, spring quarter (WILDMAN)
Spring, 59

216. Seminar in Immigration.
4 units, spring quarter (REYNOLDS) By arrangement
Spring, 1

217. Railway Problems.—A study, from the viewpoint of public policy, of the problems that arise in connection with government regulation and government ownership. Prerequisite: Course 107.
5 units, winter quarter (JONES)
Winter, 12

220. Financial Reports.—A discussion of the character of reports necessary to a proper control of the finances of private enterprises; corporate issues; dividend policy; borrower-depositor relations with banks; trade credit policy, etc. The statistical analysis of financial statements will be the mode of procedure. Prerequisite: consent of the instructor.
5 units, autumn quarter (CANNING)
Autumn, 15

221a and b. Seminar in Accounting.—Research in approved problems in the theory and practice of accountancy. Credit for *221a* will not be given until *221b* is concluded.
221a. autumn quarter
221b. winter and spring quarters (CANNING) By arrangement
Autumn, 5; winter, 13; spring, 3

222a and b. Auditing and Accounting Procedure.—This course is offered for students who are interested in auditing and accounting procedure from the standpoint of the public accountant or the treasurer, comptroller, or auditor in charge of the accounts of a commercial or industrial concern. The course should also be of interest to the student interested in credit or commercial banking, or to the student of investment banking.

The autumn quarter deals with the fundamentals of auditing. The major portion of the quarter is devoted to the balance-sheet audit, while the detailed and cash audits are only briefly considered. The spring quarter is devoted largely to a study of investigations for refinancing, for the determination of profits, and for other purposes which have become of primary importance both to bankers and to professional accountants. Report writing and the preparation of statements for the business executive or for the client are also studied.

The classroom discussions are based upon actual cases presenting the most recent views of recognized leaders in the profession. Prerequisite: for Course *222a*, consent of instructor; for Course *222b*, Course *222a*.
222a. 4 units, autumn quarter
222b. 4 units, spring quarter (JACKSON)
Autumn, 26; spring, 14

223. Operating Reports.—A discussion of the character of reports essential to the proper management of a concern with respect to internal operations; particularly the problems of inventories, of manufacturing, of purchasing, of labor turnover, and of budgetary control. Prerequisite: consent of instructor.
5 units, spring quarter (ROBBINS)
Spring, 19

225. Public Utilities.—A study of the problems that arise in connection with the regulation of public utility companies (electric light and power, gas, street railway, telephone, and water).
5 units, spring quarter (JONES)
Spring, 14

239a and b. Price Forecasting.—Economic laws governing commodity prices, methods of statistical study, and application to price forecasting. A familiarity with the theory of business cycles and of the general price level is presupposed, as well as knowledge of elementary statistical methods.
239a. 3 units, winter quarter
239b. 3 units, spring quarter (WORKING) [Not given in 1928–29]

245. Consolidated Reports.—Accounting principles involved in the construction of consolidated balance sheets and consolidated income statements.
[Not given in 1928–29]

246. Public Revenues.—Open to students who have taken the course in Public Finance, and to others on consent of the instructor.
4 units, summer quarter (DAVENPORT)
Summer, 22

247a and b. Advanced Theory.—A critical analysis of recent writings in general economic theory. The members of the class will be expected to participate freely in discussion. Prerequisites: Courses 100*a* and 100*b*, or equivalent; 247*a* is a prerequisite of 247*b*. Seniors may be admitted with the consent of the instructor.
247a. 4 units, autumn quarter
247b. 4 units, winter quarter (HALEY)
Autumn, 7; winter, 9

249. Consolidated Statements.—With the growth of business enterprises the consolidation of the accounts of agencies, branches, and affiliated corporations has become proportionately important. Methods of keeping the records, as well as consolidating the results, will be studied. Problems, reading assignments, discussions, and reports will constitute the work of the course. Prerequisite: consent of instructor.
3 units, summer quarter (JACKSON)
Summer, 8

DIVISION OF ACCOUNTANCY

Nature and Purpose.—The Division of Accountancy is created to administer a professional training course in Accountancy. The course attempts to organize the existing facilities of instruction in the University in such a way that the body of knowledge necessary to the competent practice of accounting can be most readily acquired. That body of knowledge includes: (1) a sound foundation in general mathematics and statistical method; (2) a ready and full command of certain commercial branches of private law; and (3) a real understanding of the conduct of men in their business relations and of the public problems arising from economic behavior. To this substantive knowledge must be added modes of procedure adequate for the highly specialized statistical work that constitutes the principal work of the accountant's calling.

Graduation.—In order to arrange most conveniently a program leading to the degree of Bachelor of Arts in Economics and Accountancy, the student should consult his department and division advisers as early as possible

after matriculation. The following courses are required, but the indicated sequence of work is an advisory, not a required order.

First and Second Years.—Satisfaction of the Lower Division requirements; Elements of Accounts, Elements of Cost Accounting, Elementary Economics, and 15 to 20 units of mathematics and statistical methods.

Third Year.—Public Finance (or taxation), Corporation Finance, Accountancy of Investment, Valuation, Federal Tax Procedure, Cost Analysis.

Fourth Year.—Principles of Economics, Auditing and Accounting Procedure, Capital and Income, and either Business Law (9 units) or Contracts (8 units), Financial Reports, Operating Reports, Consolidated Reports, and Accounting Problems may be taken as electives, or, in case of schedule conflicts, as substitutes for other Upper Division work.

Degree of Master of Arts.—A fifth year's program, leading to the degree of Master of Arts in Economics and Accountancy, may be arranged. This should include courses in Agency, Bills and Notes, Bankruptcy, Private Corporations, and any advanced courses in accounting not taken in the undergraduate years. Applicants for the Master's degree will be admitted to candidacy upon oral examination. Fifth-year students who mean to enter practice rather than teaching will be advised not to become candidates for the Master's degree.

DIVISION OF SOCIOLOGY

Students may major in the Division of Sociology within the Department of Economics, or within the School of Social Sciences. Those who wish to major in this division within the Department of Economics must add to the courses required by the department for Economics majors Course 2 (Elements of Sociology) and Course 101 (Labor Problems). They are urged also to include in their curriculum courses in psychology, ethics, and statistics.

Advanced Degrees.—Candidates for higher degrees may choose Sociology as a major or minor. The following may be considered as fields of study within Sociology as a whole: (1) Sociological Theory and its Development; (2) Social Psychology and its Applications, including Race Relations; (3) Social Economy and Social Legislation; Standards of Living; (4) Social Pathology; Crime, Poverty, Dependency, Physical and Mental Weakness; (5) Geographic Basis of Society; (6) Biologic Aspects of Society, and Eugenics; (7) Social Evolution and the Study of Institutions: Family, Industry, Religion; (8) Population, Immigration; and (9) Urban and Rural Sociology. It is not expected that candidates should be equally prepared in all of these fields, selection and emphasis being dictated by interests and previous preparation; but an acquaintance with the first mentioned (number one) is expected in all cases.

Medical Social Work.—Opportunity for full-time training in Medical Social Work is available at the Stanford University Clinics in San Francisco under the supervision of the Director of Social Service. Opportunity will be given for experience in connection with the Children's Clinic, Women's Clinic, and the General Medical Clinics, as well as with the hospital.

Courses Primarily for Lower Division Students

2. Elementary Sociology.—This course is an elementary study of social principles and problems which are found in human relations as expressed in social organization and institutions. Prerequisite: completion of Citizenship, or full exemption therefrom.

5 units, autumn, *winter, *spring, and *summer quarters (Reynolds, Lapiere, W. G. Beach)

Autumn, 99 (2 sections); winter, 114 (2 sections); spring, 100; summer, 46

Courses Primarily for Upper Division Students

[**Labor Problems.**—See Economics 101.]

112. Social Processes.—This course, together with 113 and 114, affords a more extended survey of the general field and problems of Sociology than is given in Course 2. Course 112 studies the basic processes of group life, suggested by such terms as socialization, opposition, accommodation, co-operation.

5 units, autumn quarter (W. G. Beach)

Autumn, 38

113. Social Evolution, Culture, and Progress.—A study of the factors and forces involved in the organization and modification of society. The meaning of culture, the nature of social change, the development of institutions, and the direction of progress are emphasized.

5 units, winter quarter (W. G. Beach)

Winter, 59

114. Social Problems.—This course serves as an introduction to applied sociology. It includes a consideration of problems arising through economic or other factors and aims to throw light upon both the causes and possible amelioration of conditions of maladjustment.

5 units, spring quarter (Reynolds)

Spring, 172

115. Population.—A study of the theories of population and problems of quantity, quality, distribution, and standards of living in modern society.

5 units, autumn quarter (Reynolds)

Autumn, 62

116. Immigration.—A general introduction to the study of immigration in the light of the principles of population, with special reference to the composition of the American people and the social problems involved in the conflicting economic standards and cultures in the United States.

5 units, winter quarter (Reynolds)

Winter, 112

Courses Primarily for Graduate Students

203. Development of Sociological Theory.—A historical and analytical study of leading sociological thinkers as a basis for an understanding of society and its problems.

4 units, autumn quarter (W. G. Beach)

Autumn, 10

204. Seminar in Immigration.

Summer quarter (W. G. Beach) By arrangement

Summer, 10

216. Seminar in Social Legislation.—The intervention of the state in protection of less favored classes and for the common social welfare is studied through special topics for individual investigation and report.

4 units, winter quarter (W. G. Beach)

Winter, 6

HISTORY

†Payson Jackson Treat, Ephraim Douglass Adams, §Frank Alfred Golder, Edward Maslin Hulme, Percy Alvin Martin, Edgar Eugene Robinson, Professors
Henry Barrett Learned, Acting Professor (Autumn Quarter)
Clyde Augustus Duniway (Carleton College), August Charles Krey (University of Minnesota), Waldemar Westergaard (University of California at Los Angeles), Acting Professors (Summer Quarter)
Yamato Ichihashi, Ralph Haswell Lutz, Associate Professors
Carl Fremont Brand, Assistant Professor
Paul Hibbert Clyde (Ohio State University), Acting Assistant Professor (Autumn, Winter, and Spring Quarters)
Obed Simon Johnson, Instructor
Harold Henry Fisher, Lecturer

The Department of History provides a liberal course for the degree of Bachelor of Arts, offers opportunity for graduate study leading to higher degrees, in certain selected fields in which the University is especially well equipped, trains teachers of History, and renders a general service to the other departments of the University.

In addition to its more specialized work, the department offers a number of courses grouped as (I) Introductory and (II) Advanced Lecture Courses intended to meet the general needs of the University constituency. The underlying principle of these courses is that they shall be useful, not in the utilitarian sense, but in the sense that they aid in equipping the student for his duties as a citizen and in giving him instruction that may be helpful in such work as law, journalism, library research, state and national public service, and in business where a knowledge of domestic and foreign affairs is desirable.

Graduation.—For History majors the curriculum for the degree of Bachelor of Arts is designed to familiarize the student with the fundamentals and methods of the chief branches of knowledge, and with the methods of historical science. With this object in view, a general system of advice and requirement has been outlined, but it may be varied to suit the circumstances of the truly exceptional student. Under the four-quarter system 180 units are required for graduation. The general system of the Department of History prescribes 45 units of History, of which 3 are required in an Introductory Seminar, and 6 in one or two Seminar Courses. In addition to the requirements of the Lower Division the department requires eight units in Economics or Political Science, and a reading knowledge of at least one foreign language by the end of the junior year. Upper Division students who have been admitted without having met the specific Lower Division requirements will be expected to offer 20 units in Economics and/or Political Science, 10 units in English Composition, a laboratory course in science, and the reading knowledge of a foreign language.

Advanced Degrees.—Graduate students, candidates for advanced degrees, are desired and will be given personal guidance, but the purposeless graduate student will not be accepted by the department. For the degree

† Absent on leave, 1928–29.
§ Deceased, January 7, 1929.

of Master of Arts, the University Library contains adequate material in all of the customary lines of historical study. This is true also in general for the degree of Doctor of Philosophy, and there are certain special fields in which the library is unusually well equipped. These are (1) English-American relations of the nineteenth century, in which topic Stanford possesses nearly all the printed documentary material anywhere available (Professor Adams). (2) The Far East, as well as the history of Australasia (Professors Treat, Ichihashi). (3) The history of California since the American occupation, particularly the political history of the state, where use may be made of the materials gathered under the provisions of the Borel Fund (Professor Robinson). (4) The French Revolution, especially in relation to political pamphleteering of the earlier years of the Revolution (Professor Lutz). (5) English history since 1200, and Canadian history since 1840 (Professor Brand). (6) An effort is being made to strengthen the material in South American history; this is now sufficient to permit of advanced research work in the history of Brazil, in which field an extensive collection of Braziliana recently donated to the University by the late President-Emeritus Branner is available to graduate students (Professor Martin). (7) The period of renaissance in Europe (Professor Hulme). (8) Modern history of Russia and of the lesser Slavic nations and (9) the World War, especially in relation to industrial, political, and social questions in all of the countries of the world, and in relation to the claims of the nations before the Peace Conference at Paris. By the generosity of Mr. Herbert Hoover a great history collection on the war is now being organized at Stanford University. In addition to comprehensive purchases of important war books, the collection is rich in sets of government documents of the leading nations, in "delegation propaganda" placed before the Peace Conference by sixty states, and in publications of the leading societies, some seven hundred in number, of France and of Great Britain. Not all of this material is as yet organized and ready for use, but graduate students will be given facilities for research in special fields.

Courses in the history department are arranged in four groups. The third and fourth groups cover, in general, the principal courses from which the graduate student may select, though he may be admitted, at the discretion of the department, to any of the general introductory, or the advanced lecture courses. The department requires for the Master's degree, the presentation of an acceptable thesis, and the passing of a written examination on elementary facts of two of the main historical fields. The work of candidates for the degree of Doctor of Philosophy cannot be determined in advance by any list of specific courses regularly offered; such candidates will be given guidance in the field selected from those indicated above.

The department has several student assistantships at $300 each which are customarily given to candidates for advanced degrees. There is also a University scholarship of $500 a year granted to a woman student in the history department.

Graduate students seeking to fulfill the requirements of the State Board of Education for the *Teacher's Certificate* will be given the necessary aid and opportunities, but will register as majors in the School of Education. (See *Announcement of the School of Education.*)

The Teacher's Recommendation in History.—Applicants for the departmental recommendation, as a major, must have completed in a manner acceptable to the department at least 45 units of History, as follows: Intro-

ductory Courses, 27 units; Advanced Lecture Courses, 9 units; Introductory Seminar Course, 3 units; Seminar Courses, 6 units.

For a teaching minor either European or American History may be offered:

a) European History—selected from Introductory Courses in European, English, and Far Eastern History, 15 units; Advanced Lecture Courses in these fields, 6 units; Introductory Seminar Course in one of these fields, 3 units.

b) American History—similar to a minor in European History, but courses in American and Latin-American History must be selected.

The Teachers' Course in History, as offered by the School of Education, is a prerequisite for either a teaching major or minor. (See Education 214.)

I. INTRODUCTORY COURSES

[**Greek History.**—See Classical Literature, Course C1, 2, 3, 4.]

[**Roman History.**—See Classical Literature, Course C5.]

10. European History, 395–1300.—A general course dealing with the development of medieval life and institutions, with special attention to feudal conditions, and also to the Church as the controlling force influencing every element of the life of the time. Open to all students.

3 units, autumn quarter (HULME) MWF 9
Autumn, 328

11. European History, 1300–1600.—A continuation of History 10, with special emphasis upon the Renaissance and the Reformation. Open to all students.

3 units, winter and *summer quarters (HULME, KREY) MWF 9
Winter, 323; summer, 60

12. Europe since 1600.—A survey of the political, economic, and social development of the European nationalities, with special emphasis upon the period of absolutism, industrial revolution, French revolution, growth of democracy and nationalism, and the World War. Open to all students.

3 units, spring quarter (CLYDE) MWF 9
Spring, 224

14. History of Russia.—A general survey of the beginnings and earlier period of Russian history. Open to all except freshman students.

3 units, spring quarter (FISHER) TThS 8
Spring, 20

16. English History to 1603.—A general outline course on the making of the English state and nation to the death of Elizabeth, with emphasis upon events and institutions especially significant for the later history of the English-speaking peoples. Open to all students, though especially intended for those in the Lower Division.

5 units, autumn quarter (BRAND) MTWThF 11
Autumn, 179

17. England since 1603, and British Overseas Expansion.—A continuation of History 16.

4 units, winter quarter (BRAND) MTWTh 11
Winter, 167

21. American History, 1607–1789.—A survey of the English colonization of the Atlantic Seaboard and of the westward movement of colonists of the British Empire, followed by a consideration of the Revolution and of the formation of the American government. Open to all students.

3 units, autumn quarter (LEARNED, DUNIWAY) MWF 10
Autumn, 181

22. American History, 1789–1848.—Presidential administrations from Washington to Polk; the War of 1812; industrial changes and expansion; abolition; political changes; territorial expansion. Open to all students.
3 units, winter and *summer quarters (Adams, Duniway) MWF 10
Winter, 200; summer, 84

23. American History, 1848–1920.—Slavery issues; the Civil War; reconstruction; industrial changes; new political parties and theories; the United States and world politics. Open to all students.
3 units, spring quarter (Adams) MWF 10
Spring, 203

24. The Westward Movement.—A survey of the expansion of the American people into the Mississippi Valley, and the American occupation of the Pacific Northwest and of California. Open to all except freshman students.
5 units, winter quarter (Robinson) MTWThF 10
Winter, 158

27. The Far East.—An account of the relations between Western nations and the peoples of Eastern Asia. Emphasis is placed upon international relations, especially since the middle of the nineteenth century, rather than upon the domestic history of the Eastern nations. The work of the Portuguese, Dutch, and British is studied and special attention is given to the rise of the British Empire in India. Open to all except freshman students.
5 units, autumn quarter (Treat) [Not given in 1928–29]

28. The Far East.—The relations of the West with China, Indo-China, Japan, and the Philippines. Open to all except freshman students.
5 units, winter quarter (Clyde) MTWThF 9
Winter, 45

31. History of Japan.—A general survey of the political, social, and economic development from the foundation of the empire to the present time. Open to all except freshman students.
5 units, spring quarter (Ichihashi) MTWThF 9
Spring, 121

36. History of Spanish America.—An outline course, dealing chiefly with the Spanish Colonial System and the Spanish-American Wars of Independence. Open to all except freshman students.
5 units, autumn quarter (Martin) MTWThF 9
Autumn, 131

37. History of South America since 1823.—A continuation of History 36. An outline course dealing with the history and institutions of the leading nations of South America; includes the discussion of such topics as the Monroe Doctrine, Pan-Americanism, and the relations between the United States and Latin America.
5 units, winter quarter (Martin) MTWThF 9
Winter, 129

40. The World War.—A survey of the causes, campaigns, and results of the war of 1914. Open to all students.
3 units, spring quarter (Fisher) MWF 11
Spring, 281

II. ADVANCED LECTURE COURSES

[The courses in this group are intended for students of at least junior standing, but sophomores may be admitted at the discretion of the instructor.]

137. European Thought and Culture.—The history of various movements of thought and ideals of culture and conduct that have been influential in the life of Western Europe.
2 units, spring quarter (Hulme) TTh 9
Spring, 133

138. Historical Method.—A course preparatory to historical research and to the teaching of history. It discusses what history is, what it is for, what are its materials, what are its methods, what are its relations to neighbor studies, how to read history, how to study it, and how to write it. It also provides for introductory studies of some of the sciences that are auxiliary to history.
3 units, spring quarter (HULME) MWF 11
Spring, 11

139. The End of the Middle Ages.—A study of the phenomena, such as the rise of towns, of new nations, and of new thought, that, in the twelfth and thirteenth centuries, prepared the way for the Renaissance.
3 units, autumn quarter (HULME) MWF 11
Autumn, 54

140. The Italian Renaissance.—The development of the new humanism in its relations to the political, social, and religious life of the time. The lectures deal with the sources as well as the evolution of the new and broadening thought of this critical and formulative period; with the revival of nationality and individuality, of literature, of art, of science, and of conscience, with the changing economic and social conditions; and with the development of political theory and the transformation of law.
3 units, winter quarter (HULME) MWF 11
Winter, 77

141. The Reformation.—A study of the causes of the ecclesiastical revolt in the sixteenth century, of the progress of the movement in its various phases, of its more immediate results, and of its bearing upon the life and thought of our own day.
3 units, winter quarter (HULME) [Not given in 1928–29]

142. The French Revolution and the Napoleonic Era.—A study of the conditions in France before 1789, the Revolution from 1789 to 1799, the organization of France under Napoleon, and the character of the Napoleonic empire.
3 units, winter quarter (LUTZ) [Not given in 1928–29]

143. Europe, 1815–1918.—A study of modern European history covering the period from the Congress of Vienna up to the present, with particular emphasis on contemporary history.
3 units, summer quarter (WESTERGAARD) MWF 9
Summer, 20

144. Europe, 1870–1927.—A study of the government, parties, and political problems of the leading nations since 1870. Special attention is given to economic imperialism in the partition of Africa, the system of secret alliances, the causes of the World War, and the political reorganization of Europe.
3 units, winter quarter (LUTZ) TThS 10
Winter, 51

145. The German Revolution.—A study of Germany during the World War, the Revolution of 1918, and the period of reconstruction to the present time.
3 units, spring quarter (LUTZ) [Not given in 1928–29]

147. Nationalism and Imperialism since 1848.—The character and consequences of nineteenth-century nationalism, of imperialism after 1878, and of the conflict of nationalism and imperialism during and since the World War.
3 units, winter quarter (FISHER) TThS 10
Winter, 17

152. The Russian Revolution.—A political and social study of Russia during the war and the revolution.
3 units, winter quarter [Not given in 1928–29]

153. The New Europe.—A study of the European situation since the Armistice, with emphasis on its economic and social aspects.
3 units, autumn and winter quarters (Fisher) TThS 9
Autumn, 27; winter, 1

154. Central Europe and the Balkans.—A survey of domestic and international developments from 1815 to 1920.
3 units, autumn quarter (Golder) [Not given in 1928–29]

156. History of Canada.—A survey of the evolution of the Dominion of Canada. Preliminary consideration of the periods of discovery, of early trade and settlement by French and British, and of the contest between France and Britain for empire, followed by a survey of the further development of the several colonies, their achievement of responsible government, their consolidation and expansion into a continent-wide federal dominion and growth to autonomous nationhood as a member of the British Empire Commonwealth. Emphasis also upon the significance in Canadian history of Canada's nearness to and relations with the United States.
4 units, spring quarter (Brand) MTWTh 10
Spring, 46

[**History of Germany.**—See Germanic Languages 191.]

158. British Constitutional History.—An attempt to explain the development, the underlying principles, and the operation of the British constitution. It is also the aim of the course to give a background for American constitutional history.
4 units, spring quarter (Brand) MTWTh 8
Spring, 155

162. History of the West.—A consideration of the political phases of the expansion of the American people; an examination of new issues and new groups that have risen in the West and their influence upon national party history.
3 units, summer quarter (Robinson) MWF 11
Summer, 48

163. The United States in the Orient.—A detailed study of American policy in Hawaii, the Philippines, China, Japan, and Korea, since 1844.
3 units, autumn quarter (Clyde) MWF 9
Autumn, 25

164. British-American Diplomatic Relations.—Lectures and reading on those incidents or conditions in foreign policy where the United States has come into conflict or contact with the foreign policy of Great Britain and her colonies; with a survey of the general purpose of British and of American foreign policy throughout the hundred-year period.
3 units, autumn quarter (Adams) MWF 10
Autumn, 31

166. History of Australasia.—An account of British colonization in Australia and New Zealand to the present time. Open to third-year students who have a satisfactory knowledge of English history.
3 units, spring quarter (Treat) [Not given in 1928–29]

167. Tropical Colonization in the Far East.—A study of the present methods of the English, Dutch, French, and American governments in their tropical dependencies in the Far East. Open to students who have taken Course 27.
3 units, spring quarter (Treat) [Not given in 1928–29]

168. Japanese Foreign Relations since 1894.—A critical examination of Japanese foreign relations beginning with the Chinese-Japanese War in 1894–95. Special attention will be given to her imperialism and to her position in world politics.
4 units, autumn quarter (ICHIHASHI) MTWF 8
Autumn, 24

169. History of Japanese Civilization.—A survey of, and an attempt to interpret, the history of Japanese civilization. Special attention will be given to the religions, philosophy, literature, and arts, fine and industrial.
4 units, winter and summer quarters (ICHIHASHI) MTWTh 8
Winter, 55; summer, 46

170. Government of Japan.—A critical study, with materials in Western languages, of the present governmental system of Japan in order to understand the underlying factors in the struggle between bureaucracy and democracy.
3 units, autumn quarter (ICHIHASHI) [Not given in 1928–29]

171. History of China.—A general survey of the political, social, and economic development of China, from the earliest times until the year 1900 A.D.
3 units, autumn quarter (JOHNSON) MWF 10
Autumn, 30

172. Modern China.—A study of modern conditions in China with special emphasis upon the changing ideas in the social, economic, political, religious, and educational realms.
3 units, winter quarter (JOHNSON) MWF 10
Winter, 33

173. History of Chinese Civilization.—A general survey of the literature, philosophy, religion, and art of China.
3 units, spring quarter (JOHNSON) MWF 10
Spring, 30

174. History of Mexico and California.—A somewhat detailed study of the history of Mexico up to the present time, and of the history of California to 1848.
3 units, spring quarter (MARTIN) MWF 11
Spring, 72

175. The American Constitution and American Ideals.—A special course for those wishing to fulfill the requirement for the Teacher's Certificate. Open to others by permission.
3 units, autumn and summer quarters (ADAMS, ROBINSON) TTh 10
Autumn, 15; summer, 34

176. Historiography.—A course designed to familiarize the student with the writings and influence of the great historians from Herodotus to the present time. The work consists of lectures, papers, and class discussions. Open to graduate students and to others at the discretion of the instructor.
3 units, spring quarter (MARTIN) T 2–4
Spring, 6

III. INTRODUCTORY SEMINAR COURSES

[The courses in this group are intended primarily for History majors in their junior year as preparation for senior seminars, or graduate work. If a course is not filled by History majors, others may be admitted at the discretion of the instructor.]

177. Studies in Medieval and Renaissance History.—An introduction to the primary and secondary sources relating to selected topics in the history

of the later Middle Ages and the Renaissance. Open to those who have had History 10 and 11, or their equivalent, and who can read at least one foreign language fluently.
3 units, spring quarter (HULME) TTh 10
Spring, 17

178. Selected Topics in Modern European History.—Papers and class discussions on important domestic and foreign problems of European nations.
3 units, spring quarter (GOLDER) [Not given in 1928–29]

180. Selected Topics in English History.—An introduction to materials for the study of English history, with assignments of special topics.
3 units, winter quarter (BRAND) MWF 9
Winter, 16

184. The World War.—A general survey of the period of the war and the armistice, with assignment of special topics for study from materials in the Hoover War Library.
3 units, spring quarter (LUTZ) MF 11
Spring, 12

186. Selected Topics in American History.—An introduction to the study of materials on the history of the West.
3 units, autumn quarter (LEARNED) MW 11
3 units, spring quarter (ROBINSON) TTh 10
3 units, summer quarter (DUNIWAY) TTh 11
Autumn, 17; spring, 10; summer, 15

190. Selected Topics in Far Eastern History.—Designed to introduce the student to materials in Western languages useful in the study of the modern history of the Far East. Open to those who have had History 28.
3 units, spring quarter (CLYDE) TTh 11
Spring, 13

195. Selected Topics in Japanese History.—An introduction to materials in Western languages useful in the study of Japanese history. Papers, reports, and discussion in class.
3 units, autumn quarter (ICHIHASHI) TTh 11
Autumn, 10

196. Selected Topics in Latin-American History.—Considerable attention will be devoted to the history of Brazil. Comparisons will also be made between Brazilian political institutions and those of Spanish America and the United States. Open to those who have had History 37 and to others with permission of the instructor.
3 units, autumn quarter (MARTIN) TTh 11
Autumn, 14

IV. SEMINAR COURSES

[For History majors primarily, of senior or graduate standing.]

205. Seminar in Medieval History.
3 units, autumn and winter quarters (HULME) Th 2–4
3 units, summer quarter (KREY) Th 2–4
Autumn, 7; winter, 7; summer, 3

207. Seminar in Modern European History.
3 units, winter and spring quarters (LUTZ) T 2–4
3 units, summer quarter (WESTERGAARD) T 2–4
Winter, 4; spring, 3; summer, 10

210. Seminar in the History of England and the British Empire.
3 units, autumn and winter quarters (BRAND) Th 2–4
Autumn, 6; winter, 6

213. Seminar in the History of the West.
3 units, winter, spring, and summer quarters (Robinson) M 2–4
Winter, 10; spring, 10; summer, 15

219. Seminar in American Diplomatic History.
3 units, winter and spring quarters (Adams) W 2–4
Winter, 12; spring, 9

225. Seminar in the History of the Far East.
3 units, autumn and winter quarters (Clyde) T 2–4
Autumn, 7; winter, 7

226. Seminar in Russian History.
3 units, autumn and winter quarters (Golder) [Not given in 1928–29]

228. Seminar in Japanese History.
3 units, winter, spring, and summer quarters (Ichihashi) Th 2–4
Winter, 8; spring, 6; summer, 4

231. Seminar in Latin-American History.
3 units, winter and spring quarters (Martin) M 2–4
Winter, 7; spring, 6

235. Senior Research.—Seniors who have completed the departmental requirements for the degree of Bachelor of Arts may receive individual guidance in problems of research.
Units, not to exceed 3. Hours by arrangement
Autumn, 5; spring, 2

240. Graduate Work.—Students properly qualified under the University regulations to pursue genuine graduate studies are given special attention and due credit allotted for the work accomplished. Such students will receive individual advice and guidance, whether in set courses or in special research.
Units, not to exceed 15 Hours by arrangement
Autumn, 14 (7 groups); winter, 21 (8 groups); spring, 18 (8 groups); summer, 12 (2 groups)

JOURNALISM

Everett Wallace Smith, Professor
Buford O. Brown, Associate Professor
Thomas George Irwin, Instructor
Waldo J. Marra, Lecturer

The Journalism curriculum is based on the conviction that the proper college training for journalism provides (1) a broad foundation of general information, (2) more specific knowledge of economics, political science, history, and other subjects with which the journalist largely deals, and (3) some technical ability in journalism and an intelligent comprehension of the obligations and responsibilities of the profession.

The requirements of the Lower Division insure that the student will come into contact with the chief branches of human knowledge and lay a basis for more advanced studies along the lines of his particular needs and interests. The requirements of the School of Social Sciences insure his specializing somewhat in the work of the departments of Economics, History, Philosophy, and Political Science, and in related subjects, at the same time leaving him opportunity for meeting the Journalism requirements and for electives.

Intending journalists are encouraged to engage in college journalism and thus obtain practical experience during their course. Students in the Division

of Journalism who do such work systematically and under the supervision of the Division will be given credit for it toward graduation. Lower Division students who plan to enter the Division of Journalism may receive 1 unit of credit per quarter for regular work on *The Stanford Daily* under the supervision of the Division of Journalism.

In some of the Journalism courses the written work must be done on the typewriter. On this account and because ability to use the typewriter is necessary for practically all newspaper work, prospective Journalism students are advised to gain this ability as early as possible.

Graduation.—Students in the Division of Journalism will meet all the requirements of the School of Social Sciences, and will take a minimum of 30 units in Journalism, including News Writing (10 units), Copy Reading (5 units), American Journalism (3 units), and Ethics of Journalism (2 units). The work in Journalism will count toward the 80 units required by the School of Social Sciences, but will not replace any of the 36 units specifically required.

Degree of Master of Arts.—The Division of Journalism is prepared to offer courses leading to the Master's degree. Editors and publishers of a large number of vigorous newspapers in rural communities and small cities, as well as in the metropolitan centers nearby, have shown a gratifying willingness to co-operate with students who are carrying on investigations. Extensive files of European and American newspapers in the Hoover War Library are valuable for this work.

COURSES OF INSTRUCTION

100. News Writing I.—Study of the structure of the news story and of news values, with practice in writing. Sources of news and methods of news gathering. Newspaper organization and news-gathering organizations. All writing in the course must be done on a typewriter.

5 units, autumn quarter (Irwin) MTWThF 8
Autumn, 27

101. News Writing II.—A continuation of Course 100. Writing of more difficult news stories, and under time limitation.

5 units, winter quarter (Irwin) MTWThF 8
Winter, 24

102. Copy Reading.—A continuation of Course 101. Copy reading, headline writing, proofreading, make-up.

5 units, spring quarter (Irwin) MTWThF 8
Spring, 38

103. Elementary Practice.—Practical work in news gathering and writing for *The Stanford Daily* or other newspapers, or on the business staff of a campus publication, with conferences. One unit of credit for three hours of work of a character satisfactory to the Division of Journalism. Open only to Journalism major students, with a maximum credit of two units a quarter, or to Lower Division students preparing to enter the Division of Journalism, with a maximum credit of one unit a quarter.

1 or 2 units, autumn, *winter, and *spring quarters (Smith, Brown, Irwin)
5 units, summer quarter (Smith, Brown) By arrangement
Autumn, 20; winter, 24; spring, 26; summer, 27

104. Advanced Practice.—Practical work in executive positions on the editorial or business staffs of campus publications, with conferences. One unit of credit for three hours of work. Open only to Journalism major students, with a maximum of three units a quarter, or to Lower Division

students preparing to enter the Journalism Division, with a maximum credit of one unit.
1 to 3 units, autumn, *winter, and *spring quarters (Smith, Brown, Irwin)
5 units, summer quarter (Smith, Brown) By arrangement
Autumn, 27; winter, 23; spring, 20; summer, 12

105. Editorial Writing.—Study of the function of the editorial, with practice in writing.
5 units, autumn and *winter quarters (Brown, Irwin) MTWThF 11
Autumn, 24; winter, 2

106. Feature Article.—Study of the feature article for newspapers and magazines, with practice in writing.
5 units, spring quarter (Smith) TTh 2–4
Spring, 15

107. American Journalism.—A survey of the development of American newspapers, and a study of the work and influence of outstanding journalists.
3 units, spring quarter (Smith) MWF 11
Spring, 23

108. Ethics of Journalism.—A consideration of problems of conduct and practice in newspaper writing, editing, and publishing.
2 units, spring quarter (Smith) TTh 11
Spring, 31

110. Editorial Management.—The conduct of the small town and country newspaper, with emphasis on the news and editorial side; the problems of the executive who directs editorial and news policies; the relation of news and editorial departments to advertising and circulation, and of news and editorial departments to each other.
5 units, winter quarter (Brown) MTWThF 10
Winter, 39

111. Business Management.—The conduct of the small town and country newspaper on the business side; costs, advertising problems, circulation, and other elements in the maintenance of a newspaper as a profit-making business enterprise. Open to those who have passed Journalism 110, and others by permission.
1 unit, spring quarter (Marra)
Spring, 16

112. Advertising Problems.—A course in the principles and practice of advertising for students who are training for journalism, and covering the subject from the standpoint of the newspaper office, especially with regard to small city and country papers. This is not planned as a general course in advertising. Enrollment is limited, and preference will be given to Journalism majors. Not open to Lower Division students.
5 units, winter quarter (Brown, Marra) MTWThF 9
Winter, 67 (2 sections)

113. Seminar in Business Problems of the Newspaper.—Open to senior or graduate students who have had the necessary prerequisites.
3 units, autumn, *winter, and *spring quarters (Brown) By arrangement
Autumn, 6; winter, 5; spring, 2

114. Seminar in Writing and Editorial Work.—Open to senior or graduate students.
Autumn, *winter, *spring, and *summer quarters (Brown, Irwin, Smith) By arrangement
Autumn, 5; winter, 5; spring, 8 (2 sections); summer, 1

201. Research.
Summer quarter (Brown) By arrangement
Summer, 1

[**Teachers' Course in Journalism.**—See Education 215.]

[**Law for the Journalist.**—See Law 104.]

PHILOSOPHY

Henry Waldgrave Stuart, †Harold Chapman Brown, Professors
Moritz Schlick (University of Vienna), Acting Professor (Summer Quarter)
Howard Dykema Roelofs, Assistant Professor
George Gentry, Acting Instructor (Winter and Spring Quarters)
Paul Arthur Schilpp (College of the Pacific), Assistant in Instruction (Summer Quarter)

The requirements for graduation in this department constitute an adequate preparation for advanced studies in Philosophy and leave opportunity for the other elements of a general or liberal education. Major students are required to present for the degree of Bachelor of Arts 35 units in Philosophy (in which Courses 1, 2, 100, 101, 102, and 200 must be included), the general courses in Psychology and in Medieval and Modern European History or English History (which should be taken during the first two years in the University), and at least 5 units in a laboratory course in a natural science. The second-year courses in French or German are recommended as a part of the Lower Division work of intending major students. Each major student will be expected to devote sufficient time to a minor subject to gain a substantial knowledge of some one of its principal divisions or aspects.

Graduate Study.—The department will, as a rule, enroll students for one year only of graduate work, leading to the degree of Master of Arts or to a minor for the degree of Doctor of Philosophy. The thesis for the Master's degree will ordinarily be so planned as not to represent more than one-third of the student's whole work for the year. All candidates for advanced degrees will be required to pass a written final examination of a general character covering the main branches of philosophical study, including the history of philosophy.

Library.—The philosophical section of the General Library contains at present (1) upwards of twenty complete sets of the leading philosophical journals—for most of which current subscriptions are carried, (2) the best available editions of the works of the principal philosophers, and (3) an extensive and constantly increasing collection of standard and contemporary literature—historical, critical, and constructive—covering the various fields of philosophical study.

ELEMENTARY COURSES

1. Logic.—The principles of Deductive and Inductive Logic, with special attention to the important types of fallacy. Open to all students.
5 units, autumn quarter (Stuart, Roelofs) TWThF 9
Autumn, 103 (2 sections)

2. Ethics.—A short survey of the morality of primitive peoples as compared with more developed forms of morality. The working principles of good conduct. The important historic theories as to the ethical criterion. Prerequisite: second-year standing.
5 units, autumn quarter (Stuart) TWThF 11
5 units, spring quarter (Gentry) TWThF 11
Autumn, 91; spring, 110

† Absent on leave, winter and spring quarters.

3. Modern Scientific Conceptions of Nature and Mind.—A study of current views of cosmic structure and the place of man and his activities in nature, in the light of recent developments in physical chemistry, evolutionary biology, and psychology.
5 units, autumn quarter (BROWN) [Not given in 1928–29]

4. Aesthetics.—The origins and nature of art. Its significance for religion, morality, and social life. The rise of art forms. Contemporary theories of aesthetics. Prerequisite: second-year standing.
5 units. (BROWN) [Not given in 1928–29]

6. Inductive Logic.
5 units, winter quarter (GENTRY) TWThF 9
Winter, 28

10. Major Traditions of European Philosophy.—The nature of Philosophy as shown in its history. The principal philosophical tendencies or schools in their historical sequence, with some account of their foremost representatives. Prerequisite: second-year standing.
5 units, spring quarter (ROELOFS) TWThF 10
Spring, 44

10a. Introduction to Philosophy.—An elementary discussion of the nature of philosophical thinking. Different roads to philosophy, starting from various domains of science and life, and leading to the different systems and divisions of philosophy shown in its history. Open to all but first-year students.
5 units, summer quarter (SCHLICK) TWThF 10
Summer, 53

INTERMEDIATE COURSES

100. History of Philosophy.—The development of philosophy from the early Greek period to Neo-Platonism. Attention is given throughout (as in the two courses which follow) to the relations of philosophy with social and political conditions and with science, literature, and religion.
5 units, autumn quarter (ROELOFS) TWThF 8
Autumn, 41

101. History of Philosophy.—The Middle Ages and the modern period to Kant.
5 units, winter quarter (ROELOFS) TWThF 8
Winter, 20

102. History of Philosophy.—The nineteenth century.
5 units, spring quarter (ROELOFS) TWThF 8
Spring, 16

104. Elements of General Philosophy.—An introductory view of the problems of metaphysics and the theory of knowledge. How these problems arise in the ordinary course of our experience. The more important types of answer which have been offered for them. Open to all Upper Division students.
5 units, winter quarter (STUART) TWThF 9
Winter, 28

105. Ethical Principles and Practical Life.—A comparative study of selections from Aristotle, the Stoics, the New Testament, Herbert Spencer, Matthew Arnold, Nietzsche, and Tolstoy. The contemporary historical conditions of various sorts which were influential in forming each type of ethical teaching, and the practical tendencies of each type as applied in actual behavior.
5 units (STUART) [Not given in 1928–29]

106. The Social Order and the Individual.—Insect and animal "societies" and the types of human social organization. Social authority and individual initiative. The ethical basis of political obligation. The nature of democracy, aristocracy, and absolutism. Prerequisite: Course 2 or an equivalent.
5 units, winter quarter (STUART) [Not given in 1928–29]

107. Religion.—The psychological and social origins of religion. The relations of religion to science, to morality, and to philosophy. The distinctive content and characteristics of the great religions.
5 units, summer quarter (STUART) TWThF 9
Summer, 26

108. The History of Intelligence.—The mental processes of primitive peoples. The beginnings of thinking and the ideal of truth. Great movements in intellectual progress. Contemporary forms of truth-seeking in art, science, and religion. Prerequisite: Course 1, 2, or 3.
5 units (BROWN) [Not given in 1928–29]

110. Plato and Platonism.
5 units (ROELOFS) [Not given in 1928–29]

111. Aristotle.—The divisions and basic principles of Aristotle's system. The extent and nature of its historic influence. Prerequisites: Courses 100 and 101.
5 units, winter quarter (ROELOFS) TTh 2–4
Winter, 16

112. Mysticism.—Important historic mystical philosophies. The distinctive elements of mysticism as a type of thought and experience. Expressions of mysticism in religion and literature. Open to approved Upper Division students.
5 units, spring quarter (ROELOFS) TTh 2–4
Spring, 8

ADVANCED AND GRADUATE COURSES

[Special work will be assigned for graduate students in connection with certain of the Intermediate Courses listed above.]

200. The Problems of Contemporary Philosophy.—A constructive discussion of the main problems of general philosophy. An important recent work will be used as a text, together with collateral reading. Prerequisites: Courses 100, 101, 102, and 104, or an equivalent.
5 units, spring quarter (STUART) TWThF 11
Spring, 14

205. Philosophical Ideas in Current Science.—In the main a discussion of A. S. Eddington's *The Nature of the Physical World.*
5 units, spring quarter (GENTRY) TWThF 9
Spring, 9

210. The Nature and Function of Mind.—A critical examination of the relations of mind to consciousness, the psychical, and physical nature. An effort will be made to attain a definition of mind and exhibit its place in the economy of life. Prerequisites: Courses 3, 100 (or 101 or 102), 104 or 108.
5 units, winter quarter (GENTRY) TWThF 10
Winter, 4

211. The Influence of Scientific Ideas on Contemporary Philosophy.—An analysis and constructive criticism of the problems of contemporary philosophy with special emphasis on their relations to current scientific conceptions. A recent work of importance is taken as the basis of discussion. Prerequisites: Courses 3, 100 (or 101 or 102), 104 or 108.
5 units, autumn quarter (BROWN) TWThF 11
Autumn, 11

212. The Influence of Scientific Ideas on Contemporary Philosophy. —A continuation of the foregoing. Students who have had Course 200 or 210 but not 211 will be admitted on approval.
5 units (BROWN) [Not given in 1928–29]

220. Theory of Knowledge.—An investigation of the foundations and the nature of knowledge based on an analysis of scientific thought and leading to a critical study of great problems of theoretical philosophy.
5 units, summer quarter (SCHLICK) TWThF 11
Summer, 14

225. Seminary.

Selected Topics.
Autumn quarter (BROWN) By arrangement
Autumn, 9 (2 groups)

Kant's Ethical Philosophy.
Winter quarter (STUART) W 2–4
Winter, 10

Kant's Critique of Pure Reason.
Spring quarter (STUART) TTh 3–5
Spring, 6

Selected Topics.
Summer quarter (STUART) By arrangement
Summer, 3

250. Thesis.
(STUART, BROWN, ROELOFS) By arrangement
Autumn, 1; summer, 2

POLITICAL SCIENCE

EDWIN ANGELL COTTRELL, GRAHAM HENRY STUART, Professors
THOMAS S. BARCLAY, WALTER THOMPSON, Associate Professors
FRANK MARION RUSSELL (University of California), Acting Associate Professor (Summer Quarter)
FLORA MAY FEARING, Acting Instructor (Summer Quarter)
JOHN N. EDY, CHESTER H. ROWELL, Lecturers
LUCILLE ALISON, ETHEL MARIE MANNING, MASAO MATSUMOTO SUMA, HUGO WALL, Assistants in Research.
JOHN BINGHAM HURLBUT, WILLIAM C. JOHNSTONE, JR., ADOLPH HAFFENBERG LEVY, KATHERINE ANDRUS NEWKIRK, THOMAS LELAND STOCK, Assistants in Instruction

[With the co-operation of PROFESSORS CATHCART, MORRISON, SHEPHERD, and WHITTIER of the School of Law.]

It is the purpose of the Department of Political Science to provide instruction for (*a*) those students, whatever their special interests, who desire to be informed about the organization, relationships, and processes of political institutions, and (*b*) those who desire to become teachers or investigators in political science. The courses offered by the department are so planned that, together with certain courses in Economics, History, Law, and Philosophy, they constitute a systematic and fairly complete treatment of the subject. Each course, except Course 1, deals with a special phase of the subject and has a definite relation to all of the other courses offered, but is so presented as to be complete in itself. Course 1 serves as a general survey of political science and as an introduction to all the other courses.

Graduation.—The department accepts as major students both the specialists and those desiring the fundamentals of a liberal education. The minimum requirements for the recommendation for the degree of Bachelor of Arts in Political Science are the completion (1) of the work of the Lower Division (or its equivalent) and (2) of about forty units of Political Science. The department will endeavor to arrange the program of each of its major students to fit his particular aims. Certain courses in Economics, History, Law, and Philosophy may be counted as Political Science at the discretion of the department. Students are advised to complete Courses 1, 2, and 15, in Political Science, while registered in the Lower Division.

Students desiring to prepare for foreign service or for municipal management are invited to confer with the department respecting the opportunities in these lines and the course of study for each.

Advanced Degrees.—The department is prepared to accept candidates for the degrees of Master of Arts and Doctor of Philosophy and direct their work in the following branches of the subject: political theory; governmental organization and relationships; elections and parties; legislative organization and methods; administration; institutions for local government; international relations; foreign service.

In addition to the requirements laid down by the Committee on Graduate Study, each candidate for an advanced degree in political science may be required to take a written and an oral examination in the subject during the first quarter of his graduate study, for the purpose of enabling the department to form a reliable judgment of his proposed program of study. Also each candidate for the Doctor's degree will be required to pass a comprehensive written examination and a second oral examination previous to his oral examination by the special committee appointed by the Committee on Graduate Study.

Teacher's Recommendation.—For the recommendation for the high-school teacher's certificate with Political Science as a major, the applicant should have completed, in a manner satisfactory to the department, at least 40 units in Political Science, including Courses 1, 2, 15, 116, 117, and 15 units of electives from graduate courses. For a minor, the applicant should have completed 23 units, including Courses 1, 2, and 116.

Library Facilities.—The University Library contains all the important literature in the various fields of political science, and in the allied subjects of economics, law, history, and sociology. The Hoover collection of war documents and publications is particularly rich in material for advanced work in political science. The library also contains complete sets of most of the periodicals devoted to the social sciences and an excellent collection of government documents. The Victor J. West Memorial Library offers primary source material for the study of legislative history and procedure.

Field Work.—California offers a particularly good field in which to study new experiments in government, especially city and county government. The close proximity of the University to a number of cities of varying sizes and different forms of government adds to the opportunities for research in original material.

ELEMENTARY AND GENERAL COURSES

1. Introduction to Political Science.—Fundamental political conceptions: state, government, nature and source of public authority, individual liberty;

governmental organization; governmental functions; political parties; international relations. This course, or its equivalent, is prerequisite for all other courses offered by the department. Prerequisite: Completion of the course in Citizenship, or full exemption therefrom.
5 units, autumn quarter (COTTRELL) MTWThF 8
Autumn, 234

2. State and Local Government.—Township, municipal, county, and state government in the United States, with special attention to California. (Open to first-year students by permission.)
5 units, spring quarter (COTTRELL) MTWThF 9
Spring, 114

15. International Relations.—The nature and importance of international relations; underlying problems: nationalism, militarism, imperialism; agencies of control: diplomatic, administrative; development of international organization, culminating with the League of Nations.
5 units autumn quarter (STUART) MTWTh 10
5 units, summer quarter (RUSSELL) TWThF 9
Autumn, 145; summer, 56

ADVANCED COURSES

[Not open to students in the Lower Division, nor to students who have not credit for Political Science 1, or a satisfactory equivalent.]

100. Elections.—The organization of the electorate for the performance of the functions of direction and control of government; theories of voting; qualifications for voting; election methods—primary and ballot laws, safeguards against fraud, election contests, etc.
5 units, winter quarter (BARCLAY) TWThF 10
5 units, summer quarter (BARCLAY) TWThF 11
Winter, 51; summer, 23

101. Legislatures and Legislation.—Composition, organization, and functions of representative assemblies; theories of representation; legislative procedure for control purposes and lawmaking; direct legislation.
5 units, spring quarter (BARCLAY) TWThF 9
Spring, 37

102. Political Parties.—The political party as a part of the political machinery; party organization; party activities; campaign methods; reform movements; public opinion and party leadership; the true functions of parties; party responsibility. (Desirable prerequisite: Political Science 100.)
5 units, spring quarter (BARCLAY) TWThF 10
Spring, 49

103. Principles of Legislation.—A study of statutory forms, drafting, interpretation of statutes, inadequacy of common law remedies, principles of correlation and standardization, and legislative areas.
4 units, autumn quarter (THOMPSON) TWThF 11
Autumn, 43

110. Administrative Organization.—Principles of administrative organization; relation of executive to other branches; territorial distribution of administrative functions; organization of executive departments; elective versus appointive executives; single versus plural executives; responsibility of administrative officers; administrative reorganization in the United States.
5 units, autumn quarter (COTTRELL) TWThF 10
Autumn, 48

111. Administrative Problems.—Methods of administrative control; the budget; accounting and reporting; purchase and supply; personnel—selection, promotion, and demotion, removal and retirement. (Desirable prerequisite: Political Science 110.)
5 units, spring quarter (COTTRELL) TWThF 11
Spring, 67

112. Municipal Administration.—The special problems of city government: city planning; streets and parks; lighting; water supply; waste disposal; health; police; fire prevention and protection; education; revenue, expenditure, and debt; public utilities. (Desirable prerequisites: Political Science 110 and 111.)
5 units, summer quarter (COTTRELL) TWThF 8
Summer, 35

113. Administration and Justice.—The principles and methods of administrative and judicial organization and procedure for the enforcement of law—the settlement of controversies, and the conviction and punishment for violation of law.
(See Law 282) (WHITTIER)

114. Foreign Service.—Organization and functions of the Department of State; duties of diplomatic and consular officers; diplomatic usage; negotiation, ratification, and termination of treaties. A limited course; students should consult instructor before enrolling.
3 units, spring quarter (STUART) MTW 9
Spring, 22

115. Colonial Administration.—Colonial expansion and its causes; modern imperialistic expansion of European states; the British self-governing dominions and the crown colonies; French, German, Dutch, and American systems of colonial administration; spheres of influence; mandate system.
3 units, winter quarter (STUART) MTW 11
Winter, 15

116. Comparative Federal Government.—An inquiry into the operation of the federal principle in the United States and other federal states. Concerned chiefly with the "division of powers" and the relationships between central and local governments; emphasis on recent tendencies.
5 units, winter quarter (BARCLAY) TWThF 8
Winter, 47

117. Parliamentary Government.—A study of those European governments in which the responsible ministry is the characteristic feature; especial attention to England and France. Emphasis on the relationships between the representative assembly and the executive.
5 units, spring quarter (THOMPSON) TWThF 10
Spring, 34

118. Government in Its Relation to Industry.—The effect on governmental problems caused by changes in business organization since the industrial revolution. The *laissez faire* versus the "general welfare" concept of governmental function. Measures needed to make the general welfare concept effective.
5 units, summer quarter (COTTRELL) TWThF 10
Summer, 74

119. Methods of Governmental Research.—The purpose of this course is the direction and training of students in methods of collecting and presenting data in governmental fields. Limited to 12 seniors majoring in Political Science or Economics.
5 units, spring quarter (COTTRELL) [Not given in 1928–29]

119a. Quantitative Studies in Politics and Administration.—A course designed for (1) those students interested in the problem of methods in the measurement and analysis of political phenomena; and (2) those who desire practice in quantitative treatment of governmental problems. The class studies the elementary statistical methods appropriate for dealing with administrative problems, with special emphasis upon (1) serviceable methods of gathering primary data; (2) tabulation of such data; (3) their presentation in such form that they may be used by the public for intelligent analysis and comparison. Students may choose problems in the fields of their immediate interest.

2 units summer quarter (FEARING) [July 30–August 29] TTh 2–5 and one hour by arrangement

Summer, 13

120. Principles and Problems of American Diplomacy.—The cardinal principles of American diplomacy and their application; the problems of neutrality, freedom of the seas, non-intervention, Pan-Americanism, the Monroe Doctrine, and international co-operation in their relation to American foreign policy.

5 units, autumn quarter (STUART) MTWTh 8

Autumn, 51

121. The League of Nations.—Critical study of the Covenant of the League of Nations; the organization and functions of the League government; the various subordinate governing agencies; the mandated areas; the work of the League of Nations. (Desirable prerequisite: Political Science 15.)

5 units, spring quarter (STUART) MTWTh 11

5 units, summer quarter (RUSSELL) TWThF 11

Spring, 67; summer, 49

122. Introduction to International Law.—Nature and scope of international law; rights and duties of states; jurisdiction; nationality; relations of states in peace and war; international law and the League of Nations. An introductory course designed for the general student.

5 units, winter quarter (STUART) MTWTh 9

Winter, 69

123. Current International Politics.—A study of the outstanding political problems resulting from the World War; the fulfillment of the peace treaties; the settlement of the allied debts; present international situation in Europe; the foreign policy of the United States in regard to Europe and Latin America. A course primarily for students interested in preparing for the foreign service.

3 units, winter quarter (ROWELL) [Not given in 1928–29]

124. International Arbitral Procedure.—The formation, jurisdiction, and procedure of arbitral commissions and boards, with special reference to claims and judgments to which the United States has been a party. Limited to advanced students specializing in international relations.

2 units, autumn quarter (STUART, RALSTON) T 1

Autumn, 12

125. Introduction to Public Law.—A study of the fundamental principles of constitutional, administrative, and municipal corporation law. Emphasis is placed upon the problems with which the student of political science is concerned. The subjects covered include limitations upon exercise of power, separation of departments, fundamental guarantees, due process and equal protection, police power, taxation, eminent domain, citizenship, suffrage, jurisdictional powers, governmental and proprietary functions, and control

of administrative officers. This course does not displace the department requirement for candidates for advanced degrees who must take the regular courses in public law as given by the School of Law.
5 units, winter quarter (THOMPSON) TWThF 8
Winter, 87

126. Public Management.
2 units, autumn and spring quarters (EDY) W 7:15 P.M.
Autumn, 18; spring, 19

GRADUATE COURSES

[Open to advanced undergraduates by permission]

201. History of Political Theory.—Development of political thinking from ancient times to the present; Classical period; Medieval period; Renaissance and Reformation; revolution and reaction; the analytical school; the historical school; recent tendencies.
5 units, autumn quarter (THOMPSON) TWThF 9
Autumn, 19

202. American Political Theories.—Development of political thinking in America from colonial times to the present day, including the theories of the Revolution, the Constitution, the Jeffersonian and Jacksonian democracies, the slavery controversy, "states' rights," and modern tendencies.
5 units, winter quarter (THOMPSON) TWThF 10
Winter, 26

203. Contemporary Political Theory.—A detailed study of the leading political ideas since the middle of the nineteenth century with special reference to the various contemporary doctrines regarding the relation of the state to property and labor—socialism, guild socialism, syndicalism, the social catholic movement, etc.
5 units, spring quarter (THOMPSON) TWThF 8
Spring, 33

204. Principles of Politics.—A systematic study of the principles of political science; scope and method of political theory; the nature of the state; the origin and basis of the state; sovereignty; the form of the state; functions of the state.
5 units, winter quarter (THOMPSON) [Not given in 1928–29]

205. The American Constitution.—A consideration of the American federal system, with especial reference to interstate commerce, the powers of Congress, governmental relations between the states and the United States, the constitutional limitations for the protection of life, liberty, and property; police power, taxation, and eminent domain.
3 units, summer quarter (BARCLAY) TWThF 9
Summer, 23

240. Seminar in Politics.—Topic for 1928–29: Parties in the Legislative Process.
2 units, winter quarter (BARCLAY) W 1
Winter, 15

241. Seminar in Government.—Topic for 1928–29: Political Biography.
2 units, spring quarter (COTTRELL) T 2
Spring, 11

242. Seminar in International Relations.—Topic for 1928–29: Organization and Function of the World Court.
2 units, autumn quarter (STUART) M 1
Autumn, 9

243. Seminar in Theory.
2 units, winter quarter (THOMPSON) T 1
Winter, 12

250. Graduate Seminar.—For candidates for higher degrees.
Spring quarter (DEPARTMENT FACULTY) Th 2
Spring, 8

The School of Law offers the following courses in public law for graduate students:

[**Constitutional Law.** Law 271 and 272.]

[**Municipal Corporations.** Law 274.]

[**Public International Law.** Law 270.]

[**Problems in Administrative Law.** Law 280.]

[**Problems in Administration of Civil Justice.** Law 282.]

The following courses offered by other departments deal very largely with subjects comprised in the field of political science:

[**Public Finance.** Economics 110.]

[**Taxation.** Economics 111.]

[**English Literature and Political Thought.** English 193.]

[**The Utopian Theme in Literature.** English 197.]

[**Propaganda and Censorship.** History 146.]

[**British Constitutional History.** History 158.]

[**Tropical Colonization in the Far East.** History 167.]

[**Government of Japan.** History 170.]

[**Military Law and Administration.** Military Science 106.]

[**Social Order and the Individual.** Philosophy 106.]

[**Social Psychology.** Psychology 158.]

PSYCHOLOGY

FRANK ANGELL, LILLIEN JANE MARTIN, Professors Emeritus

LEWIS MADISON TERMAN, †TRUMAN LEE KELLEY, WALTER RICHARD MILES, EDWARD KELLOGG STRONG, JR., Professors
ALBERT EDUARD MICHOTTE (University of Louvain), Acting Professor (Summer Quarter)
JOHN EDGAR COOVER, Associate Professor, and Research Fellow in Psychical Research
†CALVIN PERRY STONE, Associate Professor
PAUL RANDOLPH FARNSWORTH, MAUD AMANDA MERRILL, Assistant Professors
ROBERT REDFIELD (University of Chicago), ROBERT HOLMES SEASHORE (University of Oregon), Acting Assistant Professors (Summer Quarter)
CATHARINE COX MILES, Research Associate
BARBARA BURKS RAMSPERGER, Research Assistant in the Study of Gifted Children
DORTHA WILLIAMS JENSEN, E. LOWELL KELLY, QUINN MCNEMAR, BARBARA ANNE MAYER, MELITA ODEN, HORACE G. WYATT, Special Research Assistants
HELEN MARSHALL, Instructor (Assigned to School of Medicine)
LOVIC PIERCE HERRINGTON, HARRY FREDERICK ISRAEL, HOMER ELLSWORTH WEAVER, Assistants in Instruction
————, Research Fellow on the Buckel Foundation
RICHARD A. C. OLIVER, Commonwealth Fellow

The courses offered by the Department of Psychology are planned to meet the needs of three groups of students: (1) undergraduate majors in psychology; (2) candidates for the degrees of Master of Arts and Doctor of Philosophy with major or minor in psychology; (3) students who desire a general knowledge of psychology and of its applications.

Degrees of Bachelor of Arts and Master of Arts.—For the Bachelor's degree, 45 units of psychology are required, including the following courses: 51, 55, and 60 or Education 185. It is recommended that students in the Lower Division who plan to major in psychology should take a laboratory science in the freshman year, preferably physics, biology, or physiology. Majors in psychology will ordinarily be expected to take additional courses in science before graduation. The work in psychology should be begun in the sophomore year with Courses 51 and 55. Before the beginning of the junior year students are also expected to take certain courses in mathematics.

For the degree of Master of Arts, 45 units of university work are required, including 30 units of psychology in addition to the Bachelor's requirements. Of the 30 units required, 9 to 12 are ordinarily devoted to thesis. Only students whose undergraduate work has been considerably above average quality will be accepted as candidates for the Master's degree in psychology.

Degree of Doctor of Philosophy.—The minimum residence requirement is three years beyond the Bachelor's degree, of which at least one year must

† Absent on leave, 1928–29.

be spent at Stanford. Although extensive course work, or its equivalent in independent study, is required, demonstrated ability to do original research is regarded as the most important criterion of fitness for this degree.

Candidates for the Doctor's degree with a major or minor in Psychology are urged to complete their work by the age of thirty-five years. Candidates above the age of forty years will ordinarily not be accepted.

Besides acquiring a fairly broad mastery of the general field of psychology, candidates for the doctorate will be expected to do intensive work in one or more of the following lines: (1) Experimental Psychology (including animal behavior); (2) Educational Psychology (including tests and measurements); (3) Industrial Psychology. A command of statistical methods and a good reading knowledge of French and German should be acquired as early in the student's course as possible. Candidates whose major is in Experimental Psychology will be expected to take a minor or considerable work in one or more of the following sciences: biology, physiology, neurology, physics, or chemistry; those who major in Educational Psychology will ordinarily take a minor in education or in one of the biological sciences; those who major in Industrial Psychology will ordinarily take a minor in business administration, economics, education, or the social sciences.

Minor Requirements for Degree of Doctor of Philosophy.—Candidates for the degree of Doctor of Philosophy in other departments who elect a minor in Psychology will be expected to complete the equivalent of 45 units of Psychology, of which approximately half shall be of graduate character. The required work is laid out for the candidate in terms of fields to be covered, rather than in terms of courses, and a large measure of freedom is allowed in respect to the manner in which the requirements may be met. (See age limit mentioned above.)

Major for the Teacher's Certificate.—The department offers a major in Psychology for the Teacher's Certificate, but does not offer a teaching minor. The requirement for teaching major is the same as that for the Bachelor's degree in psychology; viz., 45 units.

Library.—The sum of $600 a year from the Thomas Welton Stanford Fund has been set aside for the purchase of psychological books and periodicals. A reading room is maintained in the department building, in which the leading texts and periodicals are kept.

Fellowships and Assistantships.—The Dr. C. Annette Buckel Foundation, supplemented by additional support from the Board of Trustees of the University, has provided a research fellowship for the psychology and pedagogy of backward children. A research assistantship for the study of gifted children has also been provided. There are two teaching assistantships in general and experimental psychology, and a research assistantship in animal psychology. Usually two or three other research assistantships are available in connection with special investigations.

Reagents.—A special point is made of trying to provide research students with suitable reagents. Accordingly, all advanced students are expected, when possible, to give a certain amount of time to this purpose.

Laboratory and syllabus fees.—A laboratory fee of $5.00 per quarter is charged for Courses 55 and 131. For Courses 135, 188, 203, and 245 the fee is $2.50 each. For certain other courses a syllabus fee of 50 cents to $2.00 is charged.

LABORATORIES

Aside from lecture and seminar rooms, offices, and library, the department has well-equipped laboratories comprising some thirty rooms which are adapted to research and laboratory course work, as follows:

1. *General and Experimental Psychology.*—These rooms are located mainly on the second floor of the Physics-Psychology Building. Aside from the usual equipment there is special apparatus for the photographic study of eye-movements in perception and reading; a string galvanometer outfit (large American model); respiration and metabolism apparatus; an electrical pursuitmeter; several pieces for studying motor co-ordinations and skills; a high grade player piano and other equipment for research on the psychology of music. The department faculty will assist competent students in the development of special research apparatus.

2. *Animal Psychology.*—A large amount of space on the third floor of the building is devoted to experimentation with animals. This laboratory is well supplied with various kinds of material including rats, guinea pigs, rabbits, monkeys, and sometimes other species as occasion demands. Some of the material is kept in an outside animal house. The laboratory has considerable equipment in problem boxes, mazes, and discrimination apparatus.

3. *Psychic Research.*—On the third floor Professor Coover has laboratory rooms in which experiments in the field of psychic phenomena are conducted from time to time.

4. *Statistics.*—Two rooms are equipped with computing machines and are used particularly by research associates and assistants who are conducting investigations in the general fields of mental tests and individual differences.

COURSES OF INSTRUCTION

51. General Psychology.—Survey of the field of mental life. The point of view, methods, and the experimentally attested facts of the science are presented. The primary emphasis is on normal adult psychology and applications to control of human behavior. Animal and abnormal fields are also outlined. Lectures, demonstrations, and exercises. Freshmen, seniors, and graduates may enroll only by special arrangement. Extra work is required of seniors and graduates. Enrollment limited.

5 units, autumn, *winter, and *summer quarters
autumn (MILES); winter (FARNSWORTH); summer (MICHOTTE, SEASHORE)
Autumn, 271; winter, 153; summer, 59 MTWThF 11

54. Psychology of Art.—Experimental literature on color, line, form, rhythm, illusions, stereoscopy, art tests. Theory of rhyme; origin of art behavior; art standards. Lectures, discussions, and reports. Prerequisites: Course 51 and interest in art.

3 units (FARNSWORTH) [Not given in 1928–29]

55. Experimental Psychology.—An elementary laboratory course dealing entirely with human psychology.

55a. Application of experimental method to collection and treatment of psychological data. Drill in technique of scientific observation, and use of laboratory controls. Selected experiments and demonstration of apparatus.

Planned to meet the needs both of general students and of students of educational psychology.

4 units, winter and *summer quarters
winter (FARNSWORTH); summer (SEASHORE) MWF 1:05–4:05
Winter, 40; summer, 10

55b. Either of two lines of work can be undertaken:

1. Continuation of experiments but with more complicated apparatus.
2. Detailed analysis of a single problem.

4 units, winter and *spring quarters (FARNSWORTH) MWF 1:05–4:05
Winter, 1; spring, 22

60. Introduction to Statistical Methods.—A demonstration and working course in statistical methods. Data resulting from "chance causes" are secured in a class experiment and are subjected to a complete statistical treatment, including: the determination and evaluation of measures of central tendency, dispersion, precision, reliability, and differences between means and between distributions; seriation and plotting, curve-fitting, correlation. Theory is discussed in connection with practice. Students provide Kelley's or Rugg's text and a polyphase duplex slide rule (with a B scale). Calculating machines and mathematical tables are available. Some knowledge of algebra is a prerequisite. Education 185 may be substituted for this course.

5 units, spring quarter (COOVER) MTWThF 10
Spring, 20

90. History of Psychical Research.—Lecture course. A canvas of opinion on psychic phenomena is made from the daily press, from the popular magazines, and from professional literature; a detailed study of the more important investigations by psychical researchers is made; canons of evidence and of experimental method are adduced, and the present status of the various psychic phenomena is defined. The psychology of testimony and the nature of scientific proof are considered in connection with the cases of research chosen for study. Assigned reading, class reports. Prerequisite: Course 51 or a laboratory course in science.

3 units (COOVER) [Not given in 1928–29]

101. Principles of Psychology.—Introduction to psychological concepts and methods of experimentation, with special emphasis upon learning, retention, and individual differences. Applications are made to efficiency in industry, selection and training of employees, reliability of testimony, etc. Registration restricted to students in the Graduate School of Business and the School of Engineering.

3 units winter quarter (STRONG) MWF 9
Winter, 29

110. Perception and Attention.—The topics of perception of space, motion, and time are taken up. Consideration is given to types of eye-movements, illusion, deception, observation, testimony, and report. The contributions of eidetic and gestalt psychology are reviewed. Lectures and demonstrations. Prerequisite: Course 51.

3 units (MILES) [Not given in 1928–29]

115. Memory and Thought.—The general problem is the retention and use of mental experience. A survey is made of the experimental work on memory, imagination, and the thought processes. Attention is given to such topics as retroactive inhibition, motor learning, memory systems, feats of memory, types of memory, and eidetic imagery. Lectures and class reports. Written reports are required. Prerequisite: Course 51.

3 units, autumn quarter (MILES) MWF 9
Autumn, 17

130. Animal Behavior.—A survey of the experimental studies of animal behavior. Instinct, habit, imitation, retention, transfer of training, etc., receive detailed consideration. Lectures, demonstrations, recitations, and class reports. Prerequisite: Course 51 or its equivalent.
4 units (STONE) [Not given in 1928–29]

131. Animal Behavior.—A laboratory course devoted primarily to the study of vertebrate animal behavior. A series of minor experiments on congenital behavior, habit formation, neural physiology, etc., is performed by each student. Investigations leading to theses may be undertaken in this course and continued in subsequent quarters. Prerequisite: Course 130.
(STONE) [Not given in 1928–29]

135. Physiological Psychology, Elementary.—Introduction to the structural foundations of animal and human behavior, with special emphasis on the nervous system and sense organs.
3 units (STONE) [Not given in 1928–29]

140. Psychophysical Methods.—A seminar course. Brief review of the development of psychophysical methods; systematic presentation and study of both experimental and mathematical procedures; study of the recognized sources of error in psychological experiments and means of eliminating or measuring them; application of the standard Phi Gamma methods, using Urban's tables, to typical data, usually obtained by the student in his current laboratory work; discussion of the "psychometric function." Titchener's *Quantitative Manual*, Brown and Thompson's *Essentials of Mental Measurement*, and the professional journals are used for reference. A one-unit individual report is required. Prerequisites: Courses 51, 55, and 60 or Education 185.
3 units, winter quarter (COOVER) [Not given in 1928–29]

153. Psychology of Music.—Résumé of music tests. Survey of some of the art principles underlying music. Lectures, discussion, reports. Prerequisites: Course 51 and interest in music.
4 units, autumn quarter (FARNSWORTH) MTThF 9
Autumn, 9

158. Social Psychology.—Social stimulation and response. Special attention to the relation of psychology to the social sciences. Lectures, discussion, reports. Prerequisite: Course 51.
3 units, spring quarter (FARNSWORTH) MWF 10
Spring, 39

160. Abnormal Psychology.—The symptomatology of nervous and mental diseases; institutional care and treatment of the insane; and the application of psychological aids in the diagnosis and treatment of mental disorders. Lectures, recitations, clinics, and class reports. Prerequisite: Course 51 or its equivalent (or special permission).
4 units, summer quarter (MARSHALL) MTThF 9
Summer, 30

161. Freudian Psychology.—A survey of the psychoanalytic movement in psychopathology, the techniques of psychoanalysis, and the uses of psychotherapy in education, hygiene, psychology, and medicine. Prerequisite: Course 160 or its equivalent.
3 units (STONE) [Not given in 1928–29]

165. Educational Psychology.—A general elementary course, with emphasis on the psychological bases of teaching processes. Intended primarily for prospective teachers and undergraduate students. Lectures, readings, and

reports. Prerequisite: Psychology 51, or its equivalent. Students who intend to take laboratory work in Psychology should begin with Psychology 55*a*, winter or summer quarter.

3 units, winter quarter (Benjamin) MWF 8
3 units, *summer quarter (Benjamin) MWF 9
Winter, 77; summer, 34

170. Mental Deficiency and Delinquency.—A study of mental retardation and its relation to delinquency. Mental traits of the feebleminded; heredity; classification; psychological diagnosis. Prerequisite: Course 51.

3 units (Merrill) [Not given in 1928–29]

173. Psychology and Treatment of Exceptional Children.—A study of bright and dull children. Prerequisite: Course 51.

3 units (Merrill) [Not given in 1928–29]

175. Psychical Research.—A library research course leading to a typewritten report on any phase of psychical research of special interest to the student. The more authoritative sources are examined by the student. This course may be preparatory to research. No prerequisites; permission to register required.

Autumn, winter, spring, and summer quarters (Coover) By arrangement
Autumn, 14; winter, 11; spring, 16; summer 1

180. Psychical Research.—A research course offering opportunity for experimental attack upon problems in the field of psychical research for which the laboratory equipment is adequate. Registration by permission.

Spring quarter (Coover) By arrangement
Spring, 2

185. Elementary Statistical Methods.—A study is made of the various kinds of statistical series and the properties of each. The purpose of the first part of the course is to discover what constitutes the significant features of a body of data. Opportunity to obtain practice in the computation of the important constants of distributions is given; also in the use of calculating machines and other aids to computation. The approach is inductive, starting with measures and having as its object the discovery of the statistical resources which are available for making data reveal their story. Psychology 60 may be substituted for this course.

4 units, autumn and *summer quarters (Eells) MTThF 8
Autumn, 42; summer, 62

188. Mental Tests.—An introductory course dealing with the principles and applications of intelligence tests and of methods of testing personality and character traits. Lectures and demonstrations. Prerequisite: General Psychology. A course in statistical method must accompany or precede.

5 units, summer quarter (Merrill) MTWThF 11
Summer, 23

189. Intelligence Tests.—An introductory course dealing with the technique of intelligence testing, with emphasis upon Binet procedure. Prerequisites: Courses 51, and 60 or Education 185.

4 units, winter quarter (Merrill) MTWTh 1:05–3:05
Winter, 15

190. Introduction to Cultural Anthropology.—A study of culture, drawing its materials largely from primitive peoples. Race and culture; culture forms and their distributions; the culture process; language; culture as human behavior.

5 units, summer quarter (Redfield) MTThF 10
Summer, 27

197. Modern Viewpoints in Psychology.—General survey of the viewpoints represented in writings of present-day psychologists. Lectures, discussion, and special reports. Prerequisite: Course 51.
4 units, autumn quarter (FARNSWORTH) MTThF 10
Autumn, 54

199. Reading and Special.—For undergraduates who are working on the Independent Study Plan or doing other kinds of special work.
(DEPARTMENT FACULTY) By arrangement
Autumn, 2; winter, 3; spring, 14 (4 groups); summer, 2

200. Anthropological Methods.—A consideration of the place of anthropology in the social sciences; analysis of outstanding anthropological writings from the point of view of method.
2 units, summer quarter (REDFIELD) W 3:05–5:05
Summer, 4

202. History of Psychology.—A survey of modern psychology and of the development of psychology from ancient to modern times. The various points of view which have been held regarding the mental life are considered, together with the outstanding men and publications. Lectures and class reports. A written report is required. Open to qualified graduates and to senior majors.
3 units, winter quarter (MILES) MWF 9
Winter, 6

203. Experimental Psychology, Advanced.—Laboratory work with human subjects covering a variety of topics, including complex qualitative problems and quantitative investigations. The course is designed to acquaint students with psychological apparatus, instruments, and means of measurement as well as to provide a first-hand opportunity for them to perform some experiments rather intensively. One lecture or conference with prescribed readings and two three-hour laboratory periods. Prerequisites: Psychology 51 and 55; Course 60 or Education 185 must accompany or precede.
3 units, spring quarter (MILES) MW 1:05–4:05, F 2:05–3:05
Spring, 3

205. Physiological Psychology of Action.—In general the conditions favoring and hindering mental and physical work are studied. Metabolic level, food, appetite, fasting, physical and mental fitness, sleep, fatigue, altitude and climatology, ventilation, drugs, and old age are some of the topics considered. The relation of these problems to industrial efficiency is examined. Lectures, demonstrations, class reports, and a written report. Open to qualified graduates and to senior majors.
3 units, spring quarter (MILES) MWF 9
Spring, 10

206. Psychology of Reading and Language.—The various investigations that have been made on the eye movements during reading are critically reviewed. An equipment for the photographic recording of eye movements is used in the work of the class, and the processes of obtaining meaning from the printed page and of expressing meaning in symbols are studied. Lectures, experiments, and written report. Open to qualified graduates.
3 units (MILES) [Not given in 1928–29]

210. The Learning Process.—A laboratory course providing the data and the opportunity for a qualitative and quantitative study of the development of efficiency in various learning situations involving different levels of complexity in materials and mental processes. Special attention to the statistical treatment of results and to graphic presentation, analysis of

processes, and the morphology of skill. One-hour seminar for discussion and reports of reading, and two laboratory periods weekly. Prerequisites: Courses 51 and 55.
3 units, autumn quarter (Coover) [Not given in 1928–29]

215. Advanced Human Psychology.—Modern viewpoints and trends in scientific psychology. Considerable emphasis will be given to contemporary European psychology.
4 units, summer quarter (Michotte) MTThF 8
Summer, 17

225. Educational Psychology, Advanced.—Original endowment; mental development; individual differences in relation to heredity, sex, and environment; learning, formal discipline, work and fatigue, with special reference to the school program. Independent study, discussion, and class reports. Prerequisites: Courses 51, 55 or 165, and 60 or Education 185.
3 units, autumn, winter, and spring quarters (Terman) MWF 11
Autumn, 14; winter, 14; spring, 13

230. Association of Ideas.—A seminar. The purpose is to clarify the student's conceptions of the ways in which mental elements are connected or combined or fused. Topics covered include the English "school" of association psychology and its dominance of popular psychology today; results of laboratory research; modern formulations from experimental results; importance to psychology; bearing upon learning and school practice. Assigned reading, reports, discussion, and a one-unit individual typewritten report. Registration by permission.
3 units, autumn and winter quarters (Coover) Th 7:30–9:30 P.M.
Autumn, 7; winter, 1

231. Method of Experiment.—A seminar. An examination of scientific method and its applications to various types of research in experimental psychology; a study of typical researches; applications to present problems; inspection of statistical procedures appropriate to the various types of experimental procedures; consideration of criteria of validity of results. A one-unit typed report is required. Prerequisites: Courses 55, and 60 or Education 185. Registration by permission.
3 units, winter quarter (Coover) Th 7:30–9:30 P.M.
Winter, 8

235. Psychological Analysis of Biographies.
2 units, summer quarter, first term (Terman) TTh 3:05–5:05
Summer, 21

240. Advanced Statistical Methods.—This is a continuation of Education 185 and deals primarily with series of related measures. The statistical methods of analysis of correlated data and the means of combining several measures into total scores are treated. Education 185, Psychology 60, or other equivalent course is a prerequisite.
4 units, winter quarter (Eells) MTThF 8
4 units, *summer quarter (Eells) MTThF 10
Winter, 22; summer, 8

241. Advanced Statistical Methods.—This course is a continuation of Course 240. It deals especially with problems in multiple correlation and with the statistical treatment of known linear, skew, and categorical data. Course 240 is a prerequisite. Course alternates with 315.
4 units (Kelley) [Not given in 1928–29]

244. Interpretation and Construction of Mental and Educational Tests and Measurements.—This is a continuation of Education 186,

dealing in the main with the interpretation of test scores in a diagnostic manner. Methods for the utilization of various measures in educational and vocational guidance programs are indicated. Some attention is given to the methods of construction of educational tests. Education 185, 186, and 189, or equivalents are presupposed.
4 units, spring quarter (Eells) MTThF 10
Spring, 9

245. Mental Test Practice.—The selection and use of mental tests, with laboratory practice and field work. Important types of tests are subjected to experiment and critically evaluated. Prerequisites: Courses 60, (or Education 185), 188 or 189, and one laboratory course.
4 units, spring quarter (Merrill) MTWTh 1:05–3:05
Spring, 8

247. Psychological Clinic.—Field work in juvenile court, mental hygiene clinic, and public school.
Winter, spring, and summer quarters (Merrill) By arrangement
Winter, 3; spring, 1; summer, 3

250. Experimental Problems. — A provision for individual laboratory study of some minor problem proposed by the student or suggested by the instructor. A minimum of eight hours per week in the laboratory and a typewritten report are required.
2 units, autumn, winter, and spring quarters (Miles) By arrangement
Autumn, 4; winter, 2; spring, 2

255. Mind and Body.—A seminar course. The problem of the mind-body relationship is first given a brief historical consideration. The psychological postulate of "psychophysical parallelism" is critically examined. The pertinent data of psychology, pathopsychology, and medical practice with mental disorders (including the aphasias) are collected and studied. The phenomena of hypnotism and the dissociation of personality are reviewed, and Freudian psychoanalysis is briefly but critically examined from the standpoint of physiological psychology. A one-unit individual typed report is required. Prerequisite: Course 51.
5 units, spring quarter (Coover) MTh 1:05–3:05
Spring, 5

260. Seminar in Applied Psychology.—Special problems in application of psychology to advertising, selling, vocational guidance, and personnel management. Seminar discussion will be restricted to vocational guidance and personality measurement. Registration by permission.
Autumn, winter, and spring quarters (Strong) By arrangement
Autumn, 6; winter, 8; spring, 4

309. Seminar.—Research reports and current literature in educational psychology and mental tests. Registration by permission.
1 unit, autumn, winter, and spring quarters (Terman) W 7:30–10 P.M.
Autumn, 9; winter, 12; spring, 11

310. Seminar.—Problems in mental tests and in the grading and classification of school children. Prerequisites: Courses 60 (or Education 185), and 188 or 189.
2 units (Terman, ———) [Not given in 1928–29]

311. Current Literature of Experimental Psychology.
1 unit, spring quarter (Miles) W 4:05–5:05
Spring, 3

312. Mental Development.—Seminar and problem course. A critical survey of the most important studies of infancy, childhood, adolescence, and

senescence. Intended primarily for major students in psychology or education who are in the second or third year of graduate work. Alternates with Course 313.
3 units (TERMAN) [Not given in 1928–29]

313. Psychology of Endowment.—A seminar and thesis course. Tests of general intelligence, special abilities, character and personality; the psychology of genius; mental inheritance; race differences, etc. Intended primarily for major students of psychology or education who are in the second or third year of graduate work. Alternates with Course 312.
2 units, autumn, winter, and spring quarters (TERMAN) TTh 11
Autumn, 6; winter, 10; spring, 8

314. Mental Test Problems.—For qualified students who wish to undertake an experimental problem of limited scope.
2 units, spring quarter (TERMAN, MERRILL) By arrangement
Spring, 1

315. Psychometry.—Essentially a research course. Attention is given to the analysis of mentality; to the measurement of interest; of special sensory capacity; and of certain specific habits and skills. The bearing upon problems of guidance is stressed. Education 240 and 244, or equivalent, are presupposed. Course alternates with 241.
4 units (KELLEY) [Not given in 1928–29]

325. Training in the Doctor's Dissertation.—Students in Education or other departments working upon Ph.D. dissertations, and students in Education working upon Ed.D. dissertations, who desire assistance in connection with the definition and handling of statistical problems may enroll in this course upon approval of the instructor. The work is individual and is adapted to the student's special problems. Each student is called upon to make a report each quarter upon the progress of his investigation. This course is intended for the special help of Ph.D. or Ed.D. students in Education, or Ph.D. students in other departments whose theses involve statistical procedure, and is not intended to take the place of registration for research work with individual professors.
2 units, winter and spring quarters (ALMACK) W 9–11
Winter, 13; spring, 11

330. Research and Special.
(DEPARTMENT FACULTY) By arrangement
Autumn, 10 (4 groups); winter, 11 (5 groups); spring, 9 (3 groups); summer, 1

SOCIOLOGY

WALTER GREENWOOD BEACH, Professor of Social Science
CHARLES NATHAN REYNOLDS, Assistant Professor
RICHARD TRACY LAPIERE, Assistant in Instruction

Undergraduate students in the Division of Sociology of the School of Social Sciences, in addition to meeting the requirements of the School of Social Sciences, must take at least thirty units in Sociology. (Economics 101, Labor Problems, may be counted as Sociology for this purpose.)

Advanced Degrees.—Candidates for higher degrees may choose Sociology as a major or minor. The following may be considered as fields of study within Sociology as a whole:

1. Sociological Theory and its Development
2. Social Psychology and its Applications, including Race Relations
3. Social Economy and Social Legislation; Standards of Living
4. Social Pathology: Crime, Poverty, Dependency, Physical and Mental Weakness
5. Geographic Basis of Society
6. Biologic Aspects of Society, and Eugenics
7. Social Evolution and the Study of Institutions: Family, Industry, Religion
8. Population, Immigration
9. Urban and Rural Sociology

It is not expected that candidates should be equally prepared in all of these fields, selection and emphasis being dictated by interests and previous preparation; but an acquaintance with the first mentioned (number one) is expected in all cases.

Medical Social Work.—Opportunity for full-time training in Medical Social Work is available at the Stanford University Clinics in San Francisco under the supervision of the Director of Social Service. Opportunity will be given for experience in connection with the Children's Clinic, Women's Clinic, and the General Medical Clinics, as well as with the hospital.

Courses.—The courses offered in this division are listed under the Department of Economics (p. 408).

MUSEUM AND ART GALLERY

LELAND STANFORD JUNIOR MUSEUM

PEDRO J. LEMOS, *Director*

In 1880, Leland Stanford, Jr., then eleven years of age, accompanied his parents on a trip through Europe, collecting numerous mementos of the places visited. In 1883, on a second visit, he began to pursue this object more ambitiously, and finally with the idea of establishing a museum. The Leland Stanford Junior Museum was designed by Mrs. Stanford as a memorial to perpetuate this idea, and the various collections are largely her gift to the Museum.

The collection made by Leland Stanford, Jr., between 1880 and 1884 has been placed in two rooms, and in one room his own arrangement is reproduced in a case; in the other room are found mementos of his early life. These two rooms contain especially Egyptian bronzes, Tangara figurines, Greek and Roman glass, armor, mosaics, Sèvres and Dresden ware, and the like.

The Stanford Memorial Room contains collections of personal belongings pertaining to the founders of the University. Added to these are collections connected with the early days of the University, views of buildings in construction, and details of the mosaics used in the Memorial Church.

Another room contains the famous historical relic, "The Governor Stanford," the first locomotive used on the Central Pacific Railroad, in 1864. A group of cases in this room contain collections related to early California history. The center case contains practically all the implements extant of the old Mission Dolores, presented by Don Pablo Vasquez, whose father was the last major-domo of the Mission. Included in the Mission Collection are some extremely rare relics of Father Junipero Serra and of the Carmel and Santa Barbara Missions.

The Di Cesnola Collection contains Greek and Roman pottery and glass from the Island of Cyprus.

The American Indian Collection is made up of mound relics, Indian baskets, Indian Pueblo pottery, utensils, Alaskan canoes, totem poles, etc. There is also a display of material of the Stone Age purchased by Mrs. Stanford in Denmark.

The Ikeda Chinese and Japanese Collection, purchased by Mrs. Stanford in 1904, comprises rare art material from the Orient.

In the Chinese and Japanese Room there is exhibited a collection of bronzes, arms, china, lacquer, cabinets, musical instruments, rich embroideries, and specimens of wood-carving; also the famous De Long Collection of Japanese rarities.

The Japanese Collection, purchased by Mrs. Stanford in 1902, consists of cloisonné, Satsuma, porcelain, embroideries, Buddhistic images, and ivory carvings, and includes a large bronze Koro, over 150 years old. The Corean Collection, the gift of Mr. Timothy Hopkins, contains costumes, household goods, cabinets, screens, etc. Ceramics collected by Mrs. Stanford include Sèvres, Dresden, Royal Berlin, Persian, Pompadour crystal, Bohemian, and numerous other wares.

The Egyptian Room contains: Egyptian stone carvings, alabaster canopias or jars, bronze, wooden, terra-cotta, and glazed statuettes, images, mummies, scarabs, and numberless other emblems, hand-woven linen and Coptic textile color designs, and original portrait paintings taken from mummy cases. This Egyptian material was collected for Mrs. Stanford by the Curator of the Cairo Museum, Emile Brusch Bey, and experted by Dr. Sayce, the noted Egyptologist. This room also contains a case displaying a collection of very old and rare Babylonian tablets.

The upper floor of the Museum contains a large collection of paintings collected by Mr. and Mrs. Stanford, and includes original paintings of each member of the family, by such artists as Messionier and Bonnat, also original paintings by Benjamin West, Gustave Richter, William Keith, and Thomas Hill.

THOMAS WELTON STANFORD ART GALLERY

PEDRO J. LEMOS, *Director*

The Thomas Welton Stanford Art Gallery is composed of four galleries designed for the exhibition of paintings and other works of art.

In the main galleries the collection of paintings donated by Thomas Welton Stanford is placed. Among these are pictures by Minderhout Hobbema, James Giles (R.S.A.), John Frederick Herring, Lienur, Van der Houten, Francis Snyders, W. J. Laidley, David Bates, John Yarley, Julian M. Price, J. W. Ready, William Melby, James E. Meadows, Elijah Walton (F.G.S.), W. Henry, E. Wake Cook, T. R. Miles, Sr., John Glover, Herr Schnars-Alquist, Louis Buvelot, William Hart, William Shiels (R.S.A.), S. Bird, Patrick Nasmyth, Emil Bayard, Gerard Lairesse, C. Wimmer, Salvator Rosa, G. Koken, John Weenix, Bachman, Kobell, Jr., Charles Stuart, Heinrich Rasch, Melchor Hondecooter, Marie Angelica Kaufman, George Earl, G. Guardabassi, E. G. Lewis, and J. W. Curtis.

Two galleries have been planned for the exhibition of collections of paintings, etchings, and sculpture from eastern and foreign art centers. These exhibitions are announced from time to time as they are received.

LECTURES AND DEBATES

RAYMOND FRED WEST MEMORIAL LECTURES

In 1910 Mr. and Mrs. Fred West, of Seattle, Washington, presented to the University, in memory of their son, Raymond Fred West, a student of the University who died before the completion of his college course, the sum of ten thousand dollars, to be held as a fund in perpetual trust, for the establishment of a lectureship on a plan similar to the Dudleian Lectures at Harvard University.

"It is our wish that such lectures shall not form part of the usual college or university course, nor shall they be delivered by any professor or instructor in active service in the institution. Such lecturer may be a clergyman or a layman, a member of any ecclesiastical organization, or of none, but he should be a man of the highest personal character and of superior intellectual endowment. He shall be chosen by the Faculty and the Board of Trustees of said University in such manner as the said Board of Trustees may determine, but the appointment in any case shall be made at least six months before the delivery of said lectures. . . . . The course of lectures shall be known as the 'Raymond Fred West Memorial Lectures on Immortality, Human Conduct, and Human Destiny.' "

The following general plan has been adopted by the University: The lectures are to be delivered in alternate years; the lecturer is to give at least three lectures; the lectures are to be published in book form within two years after delivery, the lecturer to have the option of publishing them himself, in which case the University will purchase a hundred copies, or of having the University publish them, in which case it will retain the copyright (in any case the manuscript of the lecturer is to be filed in the University archives); the honorarium to be decided in each case by the Board of Trustees, and unless otherwise ordered the entire earnings of the fund for the two years to be devoted to honorariums and to the purpose of publication; the lecturer is to be nominated by the President with the approval of the Advisory Board and the consent and ratification of the Board of Trustees.

These lectures have been given by Charles Edward Jefferson, Samuel McChord Crothers, Hastings Rashdall, Charles Lewis Slattery, John Dewey, Henry Osborn Taylor, Irving Babbitt, Arthur Twining Hadley, and Hugh Black. The general subject of the last series given April 25, 27, and 29, 1927, was "The Adventure of Being Men." The titles of the lectures were "The Adventure of Faith," "What Is Man?" and "If a Man Dies Shall He Live Again?"

DEBATES

Intercollegiate debates in which Stanford students participate are conducted under the auspices of the Associated Students of the University. Debate societies within the University are two in number, Euphronia, composed of men, and Wranglers, composed of women. These societies carry on debates between themselves, and with similar societies in other institutions in the Bay region.

PRE-ELECTION DEBATES

The season opened with debates with St. Ignatius College and the University of California in San Francisco, the University of Southern California in Los Angeles, on the question "Hoover vs. Smith," and with the College of the Pacific in Stockton on the question "Hoover vs. Smith vs. Thomas." Each institution was represented in each debate by a speaker representing each of the candidates. Those debating for Stanford were William L. Shaw and Arthur Angel with St. Ignatius; Charles F. Prael, Leon Carley, Virgil Whitaker, and Wadieh Shibley with California; Irving Rosenblatt and Robert McClintock with the University of Southern California; Paul Herbold, Pardee Lowe, and Elizabeth Jackson with College of the Pacific.

In the Assembly Hall on November first occurred the usual pre-election debate among the various political clubs of the University—the Hoover Club being represented by Robert Hume and John McClintock, the Smith Club by George Bodle and George Shibley, and the Thomas Club by Elizabeth Jackson and John Way. In this debate, presided over by Professor Edgar E. Robinson, the Thomas forces succeeded in converting the greatest number of votes to their beliefs, although the Hoover element remained decidedly in the majority. All of the political debates were attended by large and enthusiastic audiences, and all, excepting the local one, were no-decision contests.

STANFORD-CALIFORNIA WOMEN'S DEBATE

On November 21 and 22, Alice Behner and Isabell Warren at home on the affirmative, and Violet Crosbie and Helen Smith at Berkeley on the negative, represented Stanford against California women on the question "Resolved: That Advanced Science Tends (on the Whole) to Destroy Theistic Faith." The Stanford affirmative team influenced slightly more change of votes, the Stanford negative team slightly less change of votes, than their opponents.

STANFORD–U.S.C. DUAL DEBATE

On January 10 in Los Angeles and January 14 at Stanford, University of Southern California debaters were engaged on the question "Resolved: That Modern Advertising is More Detrimental Than Beneficial to Society." Wadieh Shibley and John McClintock upheld the negative in Los Angeles; Leon Carley, Virgil Whitaker, and Henry Harris, Jr., the affirmative at Stanford. No decision was taken at U.S.C. but at Stanford there was a heavy shift of opinion in favor of the affirmative.

WASHINGTON-STANFORD DEBATE

The "Oregon Plan" of cross-questioning was employed in the debate with the University of Washington on February 28 in the Little Theatre. John McClintock made the opening speech for Stanford and was cross-questioned by the Washington rebuttal speaker. William L. Shaw cross-questioned the opening speaker for Washington and, at the conclusion of the Washington refutation, summed up his own findings in closing rebuttal. Stanford speakers upheld the affirmative of the question "Resolved: That the Plea of Temporary Insanity in Defense of Crime Should Be Prohibited by Law." There was no decision.

THE SOUTHERN CALIFORNIA TOUR

During the spring recess Irving Rosenblatt, Lawrence Kimpton, and Norman Tyre engaged in debates with Loyola College, Occidental College, and Pomona College, upholding the negative of the question "Resolved: That Foreign Criticism of American Culture and Ideals is Justified"; and with California Institute of Technology and University of California at Los Angeles upholding the negative of the insanity defense question. The decision of the judges was won at the latter university and lost to Loyola and California Tech. The Pomona and Occidental debates were non-decision. The Loyola contest was held before a large gathering of members of the Elks Club and was marked by great enthusiasm and applause.

THE PACIFIC FORENSIC LEAGUE CONTESTS

Herbert Wenig, representing Stanford, won first place in the Oratorical Contest of the Pacific Forensic League held at Pullman, Washington, on March 28 with an oration entitled "The New Liberalism." Henry Harris, Jr., speaking on the subject "The Value of Extra-curricular Activities," represented Stanford in the Extemporaneous Speaking contest of the League held at Moscow, Idaho, on March 29 but failed to place.

THE NORTHERN TOUR DEBATES

Henry Harris, Jr., and Robert Hume met Washington University in a cross-question debate in Seattle, April first, Oregon State College at Corvallis, April 3, and Oregon University in a radio debate April 4. At Washington they debated the question "Resolved: That the Briand Amendments to the Kellogg Pacts Nullify the Effect of the Pacts," taking the negative. There was no decision. At Corvallis, before a large student body assembly, they debated the question (announced two hours before the contest) "Resolved: That the French War Debts to America Should Be Cancelled"—each institution having a speaker on each side of the question. The same question was contested at Oregon University with Stanford taking the negative.

WOMEN'S QUADRANGULAR DEBATES

Debating the subject "Is the Modern Popular Contempt of Puritanism Justified?" Ann Hightower on the affirmative at Stanford, Elizabeth Jackson on the negative at Mills College, Hallien Hickman on the negative at College of the Pacific, and Violet Crosbie on the affirmative at the University of California, each joined with a speaker from one of the above named institutions to oppose a team comprising speakers from the other two. The debates occurred on the evenings of April 2, 3, and 4. As in all other non-decision debates of the year, open forum discussion followed the formal speeches.

STANFORD-MONTANA DEBATE

Again using the insanity defense question a Stanford negative team composed of Irving Rosenblatt and William L. Shaw lost an audience decision debate to the University of Montana team, the debate occurring on April 8 at Stanford.

JOFFRE MEDAL DEBATE

For the seventh time in eight years a Stanford speaker won the Joffre medal in the annual contest with the University of California when, on April 16 at Stanford, Robert Hume was given first place by the judges. Robert McClintock of Stanford was awarded second; John Reynolds of California, third; and Henry Harris, Jr., of Stanford, fourth. The general question was "France and America." The specific question, chosen by M. Maurice Heilmann, French Consul General, of San Francisco, and announced two hours prior to the debate, was "Resolved: That the Briand-Kellogg Pacts Insure Universal Peace." Mr. McClintock, Mr. Harris, and Mr. Lester Stiner (of California) upheld the affirmative; Mr. Hume, Mr. Reynolds, and Mr. Stanley Breyer (of California) upheld the negative. The judges were Mr. T. D. Boardman and Mr. Paige Monteagle of San Francisco, and Professor W. H. Poytress of San Jose State Teachers College. Professor Ralph Haswell Lutz presided.

STANFORD–U.S.C. WOMEN'S DUAL DEBATE

The final debate on the insanity question took place on May 2 when Jean Magnus and Hallien Hickman, upholding the negative at Stanford, and Isabel Warren and Alice Behner, upholding the affirmative at Los Angeles, met woman debaters from the University of Southern California. A shift of opinion vote resulted in a tie at Stanford. No decision was rendered in the Southern debate.

STANFORD-PACIFIC DUAL DEBATE

On May 13 and 15 at Stockton and Stanford, respectively, George Bodle, George Shibley, and Edmund Jones upholding the affirmative; and Pardee Lowe, John Cranston, and Arthur Angel upholding the negative, met College of the Pacific debaters on the question "Resolved: That Foreign Criticism of American Culture, Characteristics, and Ideals, is Justified." No decision was rendered.

FRESHMAN DEBATE

"Resolved: That the United States Should Grant Soviet Russia Immediate Recognition," was the question upheld by a Freshman team composed of Francis Davis, George Hickerson and James Bednar against California Freshmen at Stanford, and opposed by Norman Sawyer, John Gange, and Isador Botasof at Berkeley. A two to one judges' decision was given the Stanford debaters in the former contest, the latter being no-decision.

DEGREES CONFERRED

([1]October 5, 1928; [2]January 4, 1929; [3]April 5, 1929; June 17, 1929)

BACHELOR OF ARTS

SCHOOL OF BIOLOGY

[2]Joseph Leo Azevedo, Jr.
Robert Anthony Bilafer
John Earl Böhm, Jr.
Katherine Edith Doyle
[1]Everette Lee Dye
[3]Esther Elizabeth Fair
[3]Ora James Gibson
[3]Charles Wolfson Gold
Ralph Leslie Hawkins
Independent Study Plan
Robert Edward Hungate
With great distinction
Kenneth Baxter Jenkins
[3]Helen Adèle Elizabeth van LöbenSels
[2]Lewis Willis Musick
Ralph Rhind
[1]John Oglesby Thomas
[2]George William Tippett
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A.B., Stanford, 1929
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B.S., Chicago, 1922
[2]Agnes Groves Plate
A.B., Stanford, 1928
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A.B., American University, 1916
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A.B., Manitoba, 1926
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A.B., Stanford, 1927
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A.B., Drury, 1924
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B.S., California, 1919

ANATOMY

Larus Arthur Sigurdson
M.D., Manitoba, 1927

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[2]John Scott Quigley
A.B., Stanford, 1926

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B.S., Arizona, 1924
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Harvey Grant Taylor
A.B., San Jose State Teachers College, 1928
[1]Edwin Belmont Tilton
A.B., Stanford, 1923
Frederic McLanahan Tonge
A.B., San Jose State Teachers College, 1928
[1]Rex Hardin Turner
A.B., State College of Washington, 1924
Carl Walther Tvedt
A.B., Luther, 1923
[3]Charles Thomas Vandervort
A.B., Stanford, 1917
[1]Frances Caroline White
A.B., Washington, 1922
[1]John Martin Whiting
A.B., Brigham Young, 1919
Charles Gilbert Wrenn
A.B., Willamette, 1926

SCHOOL OF LETTERS

ENGLISH

[1]Donald Hitt Alden
A.B., Stanford, 1927

[1]Lucy Neely McLane
A.B., Colorado State Teachers College, 1915

[1]Agnes Drummond Peters
A.B., Stanford, 1927

[1]Carl Gerhardt Stroven
A.B., Stanford, 1926

[1]Margaret Ware
A.B., Stanford, 1924

Robert Henry Wilson
A.B., Stanford, 1928

GERMANIC LANGUAGES

[2]Herman Salinger
A.B., Princeton, 1927

ROMANIC LANGUAGES

Julia Antoinette Bramlage
A.B., California, 1922

[1]Katherine May Flynn Geiger
A.B., Kansas, 1910

[1]Edna Hayward
A.B., Stanford, 1910

[1]Barbara Merrihew Perkins
A.B., Stanford, 1927

[1]Ernesto Salzmann
A.B., State College of Washington, 1914

[1]Adeline Aurora Selna
A.B., Stanford, 1922

[1]Matthew Underwood Weightman
A.B., Whittier, 1925

[3]Howard True Wheeler
B.S., California, 1920

[1]Louise Williams
A.B., College of the Sacred Heart, 1925

Margaret Louise Wood
A.B., Stanford, 1928

SCHOOL OF PHYSICAL SCIENCES

CHEMISTRY

[3]Mark Alfred Barmore
A.B., Whittier, 1927

William Frederick Dresia
B.S., Oklahoma, 1927

Herman Henry Gelmann
B.S., Fordham, 1928

Fred Louis Herman
B.S., Nebraska, 1921

Clarence Edward Lachele
B.S., Oregon State Agricultural, 1922

Lawrence Henry Lazarus
A.B., Stanford, 1928

Loilor Jordan Snyder
A.B., Stanford, 1927

GEOLOGY

Carl Calvin Addison
B.S., Kansas, 1928

[1]Robert Minssen Kleinpell
A.B., Occidental, 1926

Evans Blakemore Mayo
A.B., South Dakota, 1927

Siemon William Muller
A.B., Oregon, 1927

MATHEMATICS

Harold Maile Bacon
A.B., Stanford, 1928

Margaret Kathryn Bates
A.B., Stanford, 1928

Barry Farmer Bering
A.B., Stanford, 1926

[1]Charlotte Haynes
A.B., Bates, 1927

[1]Theron Simeon Taber, Jr.
A.B., Stanford, 1927

PHYSICS

Gerald Leondus Pearson
A.B., Willamette, 1926

SCHOOL OF SOCIAL SCIENCES

SCHOOL OF SOCIAL SCIENCES: JOURNALISM

[2]Barbara Constance Dewlaney
A.B., Stanford, 1927

[1]Allene Thorpe Lamson
A.B., Stanford, 1926

ECONOMICS

Robert Deblois Calkins
B.S., William and Mary, 1925

[3]Mahesh Chandra
A.B., California, 1922

[1]William Hasell Courtney
A.B., Vanderbilt, 1927

[3]Eleanor Shepard Hanford
A.B., Vassar, 1928

[1]Bernhardt Mackie Jensen
A.B., Stanford, 1927

[1]Victor Christian Sether
A.B., Oregon, 1921

George Kenneth Whiteside
A.B., Yale, 1922

[1]Wa-Yat Yeung
A.B., Lingnan, 1926

ECONOMICS: SOCIOLOGY

Justus Wheeler Barger
B.S., Kansas State Agricultural, 1922;
M.S., 1923

HISTORY

[1]Cecilia Rose Alexander
A.B., Mills, 1927

[1]Astrid Arnoldson
A.B., Stanford, 1927

Norvell Carlton Belk
A.B., Baylor, 1920

[1]George G. Bruntz
A.B., Hastings, 1925

[1]Ying Yuan Cheng
A.B., Stanford, 1927

Donald Langer Cherry
A.B., Stanford, 1928

Elizabeth Allerton Clark
A.B., Stanford, 1928

Ernest Galarza
A.B., Occidental, 1927

[1]Charles Henry Hunter
A.B., Stanford, 1927

Judith Ellen Johnson
A.B., Stanford, 1928

Hazel Hope Kelley
A.B., College of the Pacific, 1928

[1]Maurice Hermann Mandell
A.B., Stanford, 1928

[2]Charles Donald O'Malley
A.B., Stanford, 1928

Kate Pinsdorf
A.B., Smith, 1928

[3]Hero Eugene Rensch
A.B., Pomona, 1915

Charles Craven Scott
A.B., Stanford, 1927

[1]Huang Shih
A.B., Stanford, 1926

[1]Howard McGaw Smyth
A.B., Reed, 1923

[3]Frances Eleanor Whitehead
A.B., Saskatchewan, 1925

POLITICAL SCIENCE

Willard Foster Barber
A.B., Stanford, 1928

Yu Hui Chia
A.B., Stanford, 1928

William Frederick Cottrell
A.B., Occidental, 1925

Hugh Miller Lindsey
A.B., Stanford, 1925

[1]Joseph Robert McLaughlin
B.S., Oregon State Agricultural, 1923

[1]Elsie Mae Stouffer
A.B., Grinnell, 1924

Jui Lin Sun
A.B., Shanghai Baptist College, 1927

Leng Wang
A.B., Virginia Military Institute, 1928

PSYCHOLOGY

[2]Lovic Pierce Herrington
A.B., Stanford, 1927

[1]Stanley Bryan Lindley
A.B., Kansas, 1927

[1]Barbara Marx
A.B., Stanford, 1927

[1]Theodore Cedric Ruch
A.B., Oregon, 1927

[1]Phillip Justin Rulon
A.B., Stanford, 1926

MASTER OF BUSINESS ADMINISTRATION

Sterling Sherman Cramer
A.B., Stanford, 1925
David Hyrum Fuhriman
B.S., Agricultural College of Utah, 1926
David Crawford Houston
B.S., Brigham Young, 1927
Marcus Earl McClendon
A.B., Whittier, 1927
Francis Henry McElfresh, Jr.
A.B., Pomona, 1926
Ferris Wakefield Miles
B.S., Agricultural College of Utah, 1927
Horace Taylor Peery
A.B., Stanford, 1927
John Young Springer
A.B., Stanford, 1927
Vernon Dale Wickizer
Graduate, U.S. Naval Academy, 1925

ENGINEER

CIVIL ENGINEERING

Paul Beermann
B.S., Southern California, 1926
Allen Derbidge Christensen
A.B., Stanford, 1927

ELECTRICAL ENGINEERING

Robert Henry Angus
A.B., Cambridge, 1926
Albert Lyle Cook
A.B., Stanford, 1928
[2]Birney Dysart
B.S., Northwestern, 1927
Elmer Howard Fisher
A.B., Stanford, 1928
William Harrison Haley, Jr.
A.B., Stanford, 1928
William George Hoover
A.B., Stanford, 1928
Carl Robert Koch
A.B., Stanford, 1928
Corbett McLean
A.B., Stanford, 1927
Nathaniel Richard Morgan
A.B., Stanford, 1928
[3]Tomio Murata
A.B., Stanford, 1925
William Gilman Snyder, Jr.
A.B., Stanford, 1928
Ira Eaton Wood
A.B., Stanford, 1928

MECHANICAL ENGINEERING

William John Cope
B.S., Utah, 1923
[3]Jean Dentraygues
A.B., Stanford, 1928
[2]George Burns McCullough
A.B., Stanford, 1927

MINING AND METALLURGY

Edgar Brooker
A.B., Stanford, 1927
Benjamin Cole Craft
A.B., Stanford, 1928
Donald Crouch Linton
A.B., Stanford, 1927
Robert Emile deStrycker
Mining Engineer, Louvain, 1926

ENGINEERING CHEMISTRY

Charles Kittredge Clark
A.B., Stanford, 1928
Samuel Spaulding Todd
A.B., Stanford, 1927
Grant Edward Warren
A.B., Stanford, 1928

BACHELOR OF LAWS

Elmer Raymond Goudy
B.S., Oregon State Agricultural, 1924
Kenneth Chambers Kellar
A.B., Michigan, 1926
Gus Jerome Solomon
Ph.B., Chicago, 1926

JURIS DOCTOR

(FIRST DEGREE IN LAW)

[2]Claude Harris Adams
B.S., Utah Agricultural, 1923
James Lyman Adams
A.B., Stanford, 1927
Chester Richard Andrews
A.B., Stanford, 1927
[2]Harmon Clifford Brown
A.B., Stanford, 1927
Louis Horace Brownstone
A.B., Stanford, 1927
[2]William Harold Brunner
A.B., Stanford, 1927
[1]Burt Witte Busch
A.B., Stanford, 1927
[2]Richard Coblentz
A.B., Stanford, 1924
[2]Wilson Craven
A.B., Stanford, 1925
Philip Charlton Duncan
A.B., Stanford, 1927
[2]Jack Wagner Hardy
A.B., Stanford, 1926
[1]Robert Ziemer Hawkins
A.B., Stanford, 1925
Paul Kimball Home
A.B., Pomona, 1926
Paul Edgar Jackson
A.B., Stanford, 1926
[3]Frank Randolph Karr
A.B., Stanford, 1926
Richard Norbert Kavanaugh
A.B., Notre Dame, 1926
Paul Harold Kocher
A.B., Columbia, 1926
John Jacob Laykin
A.B., California, 1924
John Arthur Leiter
A.B., Stanford, 1927
Rhoda Valentine Lewis
A.B., Stanford, 1927
Lawrence Michael Linneman
A.B., Stanford, 1925
Robert McDonald Charles Littler
A.B., Stanford, 1925, A.M., 1927
[1]John Herschel Lyon
A.B., Stanford, 1927
Kenneth Raymond McDougall
A.B., Stanford, 1927
Frank Raphael McNamee, Jr.
A.B., Stanford, 1927
[1]Edward Perry Morton
B.S., Pennsylvania, 1917
[2]Sigvald Nielson
A.B., Alberta, 1922, LL.B., 1924
John Orrick Palstine
A.B., Stanford, 1926
Robert Eliot Paradise
A.B., Stanford, 1927
William Armstrong Percy
A.B., Stanford, 1928
Harold Willoughby Peterson
A.B., Stanford, 1927
[3]Thomas Brennan Quinn
A.B., Stanford, 1927
[3]Harry John Rathbun
A.B., Stanford, 1916, Engineer, 1920
[2]William Bruce Renwick
A.B., Minnesota, 1926
[2]Lynn Stephen Richards
A.B., Brigham Young, 1925
Suren M. Saroyan
A.B., Stanford, 1927
[3]Carl Robert Schulz
A.B., Stanford, 1926
Ewing Sibbett
A.B., Stanford, 1927
[1]Charles Joseph Simon
A.B., Stanford, 1926
[2]George Slaff
A.B., Harvard, 1926
[2]Samuel Slaff
A.B., Stanford, 1925
Archie MacNicol Stevenson
A.B., Stanford, 1926
[1]Eugene Maxwell Stevenson
A.B., Stanford, 1926
[1]Webster Finley Street
A.B., Stanford, 1926
[1]George Wesley Tackabury
A.B., Stanford, 1926
[2]Fred Ames Weller
A.B., State College of Washington, 1925
[1]Wendell Oliver Widaman
A.B., Stanford, 1926
[3]Fred Austen Wool
A.B., Stanford, 1927
Frank Benjamin Yoakum, Jr.
A.B., Stanford, 1927

JURIS DOCTOR

(SECOND DEGREE IN LAW)

Tsung Yuh Nyi
A.B., Chih Tze, 1928; LL.B., Comparative Law School of China, 1928

DOCTOR OF MEDICINE

Albert Samuel Arkush
A.B., Stanford, 1925
Frederick Alford Bennetts
A.B., Stanford, 1925
Perry Arthur Bonar
A.B., Stanford, 1925
Frederic Wallace Borden
A.B., Stanford, 1925
Roswell Donaldson Borley
A.B., Stanford, 1925
David Emillius Brinkerhoff
A.B., Southern California, 1923
Norton Sager Brown
A.B., Stanford, 1925
Edward Merchant Butt
A.B., Stanford, 1924
George Arthur Cann
A.B., Nevada, 1923
William Silas Cann
A.B., Nevada, 1923
James Gilmore Carson
A.B., Stanford, 1925
Henry Docfoo Cheu
A.B., Stanford, 1925
Jessie Reed Cockrill
A.B., Western College for Women, 1918
Leon Oliver Desimone
A.B., Stanford, 1925
Francis Harold Downing
A.B., Stanford, 1925
Arthur Alexander van Druten
A.B., Stanford, 1925
Margaret Adelaide Eakin
A.B., California, 1919
Anthony Ambrose Ferrante
A.B., Stanford, 1925
Morris Richard Gordon
A.B., Stanford, 1925
Earl Haskins Gray
A.B., Stanford, 1925
Paul Edward Hoffmann
A.B., Stanford, 1925
Ralph Denny Howe
A.B., Stanford, 1925
Richard David Husband
A.B., Stanford, 1926
Madeline Johnston
A.B., Reed, 1919
[3]Albert Paul Krueger
A.B., Stanford, 1925
Eric Liljencrantz
A.B., Stanford, 1925
Harry Richard Lusignan
A.B., Stanford, 1925
Arthur Ashley Marlow
A.B., Stanford, 1925
Samuel Marion Martins
A.B., Stanford, 1925
Marshall Irwin Mason
A.B., Stanford, 1925
John Johnston Miller, Jr.
A.B., Stanford, 1925
Clarence Henry Nelson
A.B., Stanford, 1925
Roderick Alan Ogden
A.B., Stanford, 1925
Joseph Jerome O'Hara
A.B., Stanford, 1925
Sadie Dernham Patek
A.B., Stanford, 1911
Madge Peirsol
A.B., Pomona, 1921
W. Scott Polland
A.B., Stanford, 1925
William Walter Reich
A.B., Philippines, 1917, B.S., 1919;
A.M., California, 1921, Ph.D., 1923
Archie Marvin Roberts
A.B., Southern California, 1924
Lorenz Weir Ruddy
A.B., Stanford, 1925
Theodore Paul Schomaker
A.B., Stanford, 1925
John Stewart Stephens
A.B., Stanford, 1925
Kenneth Maynard Taylor
A.B., Oberlin, 1923
Kenneth Joseph Thompson
A.B., Stanford, 1925
Harold L. Weaver
A.B., Southern California, 1924
Fleta Hazel Williams
A.B., Stanford, 1920, A.M., 1925
John Madden Wright
A.B., Stanford, 1925
Roscoe Lee Zieber
A.B., Stanford, 1925

DOCTOR OF PHILOSOPHY

SCHOOL OF BIOLOGY

[1]Howard Calvin Day
A.B., Lawrence, 1924;
A.M., Stanford, 1926

Harold Mestre
A.B., California, 1923

[1]Douglas Merritt Whitaker
A.B., Stanford, 1926

BACTERIOLOGY AND EXPERIMENTAL PATHOLOGY

Paul Jay Beard
B.S., Iowa Agricultural, 1925,
M.S., 1927

BOTANY

Willis Pierre Duruz
B.S., Rutgers, 1917, M.S., 1922

[3]Bert Alexander Rudolph
B.S., California, 1914, M.S., 1915

[1]Ethel Ida Sanborn
A.B., South Dakota, 1904, A.M., 1907

ZOÖLOGY

Joseph Conrad Chamberlin
A.B., Stanford, 1923, A.M., 1924

[2]David Shepherd
A.B., Utah, 1918; A.M., Stanford, 1924

SCHOOL OF EDUCATION

EDUCATION

[1]Ralph Waldo Swetman
Ph.B., Hamilton, 1907;
A.M., Columbia, 1917

SCHOOL OF LETTERS

ENGLISH

[3]Ray Cooke Stoker
A.B., Texas, 1922, A.M., 1923

[1]George Williamson
A.B., Stanford, 1920;
A.M., Harvard, 1923

SCHOOL OF PHYSICAL SCIENCES

CHEMISTRY

Robert DuBois
A.B., Carleton, 1918;
M.S., Oklahoma Agricultural, 1919

[1]Willis Conard Fernelius
A.B., Stanford, 1926, A.M., 1927

Wallace Alfred Gilkey
A.B., Stanford, 1922, Engineer, 1923

Samuel Stephens Kistler
A.B., Stanford, 1921, Engineer, 1922

Charles Ronald Peaker
B.S., Saskatchewan, 1925, A.M., 1927

Herbert Giles Tanner
B.S., Ottawa, 1915;
A.M., Nebraska, 1916

Pierre Jean Van Rysselberge
Engineer, Libre de Bruxelles, 1927;
A.M., Stanford, 1928

Robert Case Williams
A.B., Oberlin, 1925, A.M., 1927

[1]Hung Chau Wong
A.B., Stanford, 1925, Engineer, 1925

GEOLOGY

Joseph Désiré Hubert Donnay
Engineer, Liége, 1925
Leo George Hertlein
A.B., Oregon, 1922;
A.M., Stanford, 1923
[3]James Chandler Ray
A.B., Stanford, 1914, A.M., 1915
George Gordon Suffel
B.S., Queen's University, 1925

SCHOOL OF SOCIAL SCIENCES

ECONOMICS

[1]Donald Elliott Anthony
A.B., Stanford, 1922;
A.M., Cornell, 1923
James Kendall Hall
A.B., Oregon, 1925, A.M., 1926
[2]Joseph Grant Knapp
B.S., Nebraska, 1922, A.M., 1923
[1]Carl Burton Robbins
A.B., Stanford, 1924, A.M., 1925;
M.B.A., Harvard, 1927

HISTORY

[1]Meribeth Elliott Cameron
A.B., Stanford, 1925, A.M., 1926
[1]David Harris
A.B., Stanford, 1925, A.M., 1925

POLITICAL SCIENCE

[2]Tienkai Lincoln Tan
A.B., Peking Government Teachers College, 1922; A.M., Stanford, 1924
[1]Francis Graham Wilson
A.B., Texas, 1923, A.M., 1924

PSYCHOLOGY

[2]Helen Pye Davidson
A.B., Stanford, 1924, A.M., 1925
Richard Wellington Husband
A.B., Dartmouth, 1926;
A.M., Stanford, 1927
[3]Dortha Williams Jensen
A.B., Indiana State Normal, 1922;
A.M., Ohio, 1925
Barbara Burks Ramsperger
A.B., Stanford, 1924

FELLOWS AND SCHOLARS

([1]Autumn quarter only; [2]winter quarter; [3]spring quarter; [4]summer quarter; [5]all four quarters.)

1928–29

FELLOWS

AMERICAN-GERMAN STUDENT EXCHANGE FELLOW

Karl Heinz Pfeffer (History).....Frankfurt-am-Main, Germany

TEACHING FELLOW IN CHEMISTRY

Veon Carter Kiech (Chemistry).....Albuquerque, New Mexico
A.B., New Mexico, 1924; A.M., Stanford, 1928

COMMONWEALTH FUND FELLOWS

Robert Henry Angus (Electrical Engineering).....Yorkshire, England
B.D.A., Cambridge, 1926; Engineer, Stanford, 1929

Walter Russell Crocker (History).....Oxford, England

Richard Alexander C. Oliver (Psychology).....Edinburgh, Scotland
A.M., Edinburgh, 1925, Ed.B., 1927

C.R.B. EDUCATIONAL FOUNDATION FELLOWS

Joseph D. H. Donnay (Geology).....Waremme, Belgium
C.E., Liége, 1925; Ph.D., Stanford, 1929

Robert Emile de Strycker (Mining).....Antwerp, Belgium
Engineer, Louvain, 1926; Engineer, Stanford, 1929

Pierre T. Van Rysselberge (Chemistry).....Brussels, Belgium
Engineer, Librede, 1927; A.M., Stanford, 1928, Ph.D., 1929

CUBBERLEY FELLOWS IN SCHOOL ADMINISTRATION

Reginald Bell (Education).....Mayfield
A.B., Oberlin, 1916; A.M., Stanford, 1928

William George Carr (Education).....Palo Alto
A.B., Stanford, 1924; A.M., 1926

Fred Lyman Tibbitts (Education).....Tulsa, Oklahoma
A.B., Oklahoma, 1916, A.M., 1919

HIGH-VOLTAGE LABORATORY RESEARCH FELLOW

[5]Leland Hermon Brown (Electrical Engineering).....Palo Alto
A.B., Stanford, 1922, Engineer, 1924

DONALD PORTER JACOBS RESEARCH FELLOW

[2][1]Robert Gibbon Bernreuter (Psychology).....Daly City
A.B., College of the Pacific, 1924

ERIC KNIGHT JORDAN RESEARCH FELLOW

Lionel William Wiedey (Geology).....Alhambra
A.B., California at Los Angeles, 1926; A.M., Stanford, 1928

TEACHING FELLOWS IN MATHEMATICS

[12]Cleo Garland Adelsbach.....Visalia
A.B., Stanford, 1928

Lucille Copple Wiedmann.....Palo Alto
A.B., California at Los Angeles, 1926

DU PONT DE NEMOURS AND COMPANY FELLOW

Robert Avery Fulton (Chemistry).....Corvallis, Oregon
B.S., Oregon Agricultural, 1925

ROYAL VICTOR FELLOWS

[4]Laura Flora Garnjobst (Zoölogy).....Salem, Oregon
B.S., Oregon State Agricultural, 1922; A.M., Stanford, 1927

[23]John Wynn Gillespie (Botany).....Albany, Georgia
B.S., Georgia, 1923; A.M., Stanford, 1926

[12]Doris Kell Kildale (Botany).....Eureka
A.B., Stanford, 1926, A.M., 1927

[2,14]Max Walker deLaubenfels (Zoölogy).....Pacific Grove
A.B., Oberlin, 1916; A.M., Stanford, 1926

[5]C. Ward Macy (Economics).....Cedar Rapids, Iowa
A.B., Grinnell, 1920; A.M., Iowa, 1923

[21]Evans Blakemore Mayo (Geology).....Palo Alto
A.B., South Dakota, 1927; A.M., Stanford, 1929

David Lyall Patrick (English).....Palo Alto
A.B., Iowa, 1922; A.M., Stanford, 1926

David Shepherd (Zoölogy).....Logan, Utah
A.B., Utah, 1918; A.M., Stanford, 1924, Ph.D., 1928

Janet Louise Weston (Economics).....Champaign, Illinois
A.B., Illinois, 1927

Robert Case Williams (Chemistry).....Wooster, Ohio
A.B., Oberlin, 1925, A.M., 1927; Ph.D., Stanford, 1929

THOMAS WELTON STANFORD FELLOW IN PSYCHIC RESEARCH

John Edgar Coover.....Stanford University
A.B., Stanford, 1904, A.M., 1905, Ph.D., 1912

UNIVERSITY FELLOWS

Robert Deblois Calkins, Jr. (Economics).....Williamsburgh, Virginia
B.S., William and Mary, 1925; A.M., Stanford, 1929

Jessie Reed Cockrill (Medicine).....Watertown, Massachusetts
A.B., Western College for Women, 1918

Danella Straup Cope (Chemistry).....Salt Lake City, Utah
A.B., Utah, 1923; A.M., Stanford, 1926

[23]Madeleine Kathryn Doran (English).....San Diego
A.B., Stanford, 1927

Robert DuBois (Chemistry).....San Francisco
A.B., Carleton, 1918; M.S., Oklahoma Agricultural and Mechanical, 1919; Ph.D., Stanford, 1929

Ernest Galarza (History).....Sacramento
A.B., Occidental, 1927; A.M., Stanford, 1929

Richard Wellington Husband (Psychology).....Hanover, N. H.
A.B., Dartmouth, 1926; A.M., Stanford, 1927, Ph.D., 1929

Iva Marie Jones (English).....Fort Dodge, Iowa
A.B., Iowa, 1928

Charles Ronald Peaker (Chemistry).....Yorktown, Saskatchewan
B.S., Saskatchewan, 1925, A.M., 1927; Ph.D., Stanford, 1929

[23]Melville Sahyun (School of Biology).....Santa Barbara
A.B., American University (Syria), 1916
Thomas Leland Stock (Political Science).....Sacramento
A.B., Stanford, 1927
Ira Loren Wiggins (Botany).....Palo Alto
A.B., Occidental, 1922; A.M., Stanford, 1925
[4]Carl Brandt Wolf (Botany).....Palo Alto
A.B., Occidental, 1926; A.M., Stanford, 1927

SCHOLARS

ALUMNI SCHOLARS

[3]Henry Kendall Albertson (School of Engineering).....Los Angeles
[3]Corwin Walter Artman (Lower Division).....Long Beach
Harris Dixon Bogue (Lower Division).....Burlingame
[1]Horace Hodge Davidson (Economics).....Berkeley
A.B., Stanford, 1929
[3]John Hope Doeg (Lower Division).....Santa Monica
[1]Bernard Colean Ely (Political Science).....Bakersfield
A.B., Stanford, 1929
[3]Albert Edward Forster (History).....Los Angeles
Ralph Lud Frentrup (Economics).....Berkeley
Theo Harder (Political Science).....Bakersfield
A.B., Stanford, 1929
[2]Walter Heinecke (Geology).....Santa Ana
[5]Peter Eugene Heiser (Lower Division).....Stockton
[1]Clifford Pearson Hoffman (Sch. of Soc. Sciences—Journalism)...Petaluma
A.B., Stanford, 1929
[3]Ray Jessie Hulen (Lower Division).....Long Beach
[3]James Edward Kelley (Lower Division).....Los Angeles
Eric Christian William Krenz (Economics—Accountancy).....Stockton
[3]William Harrison Laird (Political Science).....Los Angeles
[12]Arthur Presley Lites (Lower Division).....Taft
[3]Alex Michael McKinnon (Civil Engineering).....Los Angeles
A.B., Stanford, 1929
[1]Michael Mark Murphy (Economics).....Berkeley
A.B., Stanford, 1929
[1]Robert Louis Philippi (Education—Graphic Art).....Norwalk
A.B., Stanford, 1929
[1]Seraphim Fred Post (Mechanical Engineering).....Berkeley
A.B., Stanford, 1929
[3]Rudolph A. Rintala (Lower Division).....San Francisco
[1]Roland Sellman (Economics).....San Francisco
A.B., Stanford, 1929
[23]William John Simon (School of Engineering).....El Paso, Texas
[3]Perry Norman Taylor (Geology).....Tulare
[3]Thomas Burton Williams (Lower Division).....Los Angeles
[3]Frank Starr Wilton (Sch. of Soc. Sciences—Journalism).Huntington Park
A.B., Stanford, 1929

ALUMNI JORDAN SCHOLARS

August Reich (Medicine).....Bakersfield
A.B., Stanford, 1928
Lee Mitsuyoshi Watanabe (Medicine).....Fresno
A.B., Stanford, 1927

ANGLO-CALIFORNIA TRUST COMPANY SCHOLAR

John Higby Peck (Lower Division).....San Francisco

ANONYMOUS SCHOLAR

[12]Chester Wiggin Blackman (English).....Alhambra

BENEVOLENT AND PROTECTIVE ORDER OF ELKS SCHOLARS

Henry Purinton Grace (Lower Division).....San Francisco
Milton Morris Hartman (Chemistry).....San Francisco
A.B., Stanford, 1929

BERTHA HYDE BRALY SCHOLAR

[23]Frances R. Giffen (Economics).....Fowler

CAP AND GOWN SCHOLARS

Beth Tollan Pinkston (Lower Division).....Los Angeles
Ruth Elizabeth Tinsley (Psychology).....Kansas City, Missouri
A.B., Stanford, 1929

CIVIL ENGINEERING SCHOLAR

Edwin Alexander Fairbairn (Civil Engineering).....Sacramento
A.B., Stanford, 1929

E. C. CONVERSE SCHOLARS

Winford Bernarr Bates (Lower Division).....Santa Barbara
Mary Benita Comings (Lower Division).....Ramona
Albert Clare Daniels (Chemistry).....Pueblo, Colorado
A.B., Stanford, 1929
Theodore Mitchell DeMotte (Lower Division).....Ukiah
[1]Hermet Melven Frame (Lower Division).....Selma
John Frederic Gange (Lower Division).....Palo Alto
Genevieve Goddard (Lower Division).....Escalon
[1]George Homer Gribbin (English).....Nashville, Michigan
A.B., Stanford, 1929
Frederick Henry Hawkins, Jr. (Lower Division).....Pasadena
[21]James Askew Kelley (Lower Division).....Tulsa, Oklahoma
Arthur Kroeger (Lower Division).....Fullerton
[1]Arthur Fleming Scotten (Classical Literature).....Pasadena
A.B., Stanford, 1929
Edward Stone Shaw (Economics).....Palo Alto
A.B., Stanford, 1929
Edmond Maurice Wagner (Mechanical Engineering).....San Francisco
A.B., Stanford, 1929

MABEL HYDE CORY SCHOLAR

Irene Lucile Way (History).....Petaluma
A.B., Stanford, 1929

WILLIAM S. CRANSTON MEMORIAL SCHOLAR

Austin Rhone Clapp (Lower Division).....Hollywood

GEORGE E. CROTHERS LAW SCHOLAR

Dallas Leslie Barrett.....Long Beach
A.B., Stanford, 1923

W. J. DICKEY SCHOLARS

Hilliard Roy Giffen (Economics—Accountancy).....Fowler
A.B., Stanford, 1929
William Webster Hansen (Physics).....Fresno
A.B., Stanford, 1929

HENRY G. DODDS SCHOLAR

John Turner Reid (Spanish).....Palo Alto

ORRIN W. DUNN SCHOLAR

Amos Ross Mead (Mechanical Engineering).....Turlock

EAST BAY STANFORD WOMEN'S CLUB SCHOLAR

[2]Gladys Louise Crofoot (Lower Division).....Oakland

MRS. CORDELIA ELKUS SCHOLAR

Clifton Reynolds Montgomery (Law).....Lodi
A.B., Stanford, 1928

ENCINA CLUB SCHOLARS

Henry Colwell Ramsey (Lower Division).....Arcata
Ernest A. Wells (Lower Division).....Pasadena

WALTER MASON FIELD SCHOLAR

Adelbert Nevin Culling (Economics—Accountancy).....Beverly Hills

HIRAM C. FISK SCHOLAR

Ronald Stone Anderson (School of Social Sciences).....Palo Alto
A.B., Stanford, 1929

FOUNDATION FOR THE ADVANCEMENT OF SOCIAL SCIENCES SCHOLARS

[4]John Chamberlain McClintock.....Altadena
[4]Robert Mills McClintock.....Altadena

FLORENCE HECHT FRIES SCHOLAR

Alvin Joseph Cox, Jr. (Medicine).....Palo Alto
A.B., Stanford, 1927

GERTRUDE GARDINER SCHOLAR

Mary Piers Walton (Economics).....Burlingame
A.B., Stanford, 1929

WILLIAM F. HERRIN SCHOLAR

Virgil Keeble Whitaker (Classical Literature).....Spokane, Washington
A.B., Stanford, 1929

BRODIE G. HIGLEY SCHOLAR

Jack Leroy Wilson (Economics—Accountancy).....Los Angeles

E. W. HOPKINS SCHOLARS

Julian Devreau Barksdale (Geology)....Beaumont, Texas
Hallien Hickman (Lower Division)....Centerville, Iowa
John Theodore McAnaw (Political Science)....Cincinnati, Ohio
Stanley Johnson Madden (Lower Division)....San Jose
Harold Leroy Severance (Lower Division)....Great Falls, Montana
Starr Thomas (Lower Division)....Riverside

MRS. S. BAYLOR KEENAN SCHOLAR

[3]Edward William Wilson (Lower Division)....Palo Alto

CHARLES ANDREWS HUSTON MEMORIAL SCHOLAR

James Lyman Adams (Law)....Long Beach
A.B., Stanford, 1927, J.D., 1929

IRA S. LILLICK SCHOLAR

Arthur Capps Miller (Law)....Palo Alto
A.B., Stanford, 1928

MRS. IRA S. LILLICK SCHOLARS

[1]Sigvald Nielson (Law)....Edmonton, Alberta
A.B., Alberta, 1922, LL.B., 1924; J.D., Stanford, 1929
[2,3]Orville Arnold Rohlf (Law)....Minneapolis, Minn.
A.B., Minnesota, 1927

ERNEST A. LOVE SCHOLAR

Raymond Charles Carlson (Spanish)....Miami, Arizona
A.B., Stanford, 1929

MRS. McDOWELL ROBLE CLUB SCHOLAR

Frances Geraldine Sanford (English)....Burlingame
A.B., Stanford, 1929

ROBERT S. AND FLORENCE MOORE SCHOLAR

Harold Chester Torbert (Physiology-Medicine)....San Diego
A.B., Stanford, 1929

MAUD HUNTSBERGER PECK SCHOLAR

Phillip Hunt Wells (Physiology—Medicine)....Pasadena
A.B., Stanford, 1929

P.E.O. SCHOLAR OF THE SANTA CLARA DISTRICT

Nanelia Siegfried (School of Letters)....Palo Alto

SAN FRANCISCO POLYTECHNIC HIGH SCHOOL SCHOLAR

Harry Nathaniel Winton (Lower Division)....San Francisco

MARGARET SIDNEY SCHOLAR

Mary-Catherine Baldwin (Medicine)....Riverside
A.B., Stanford, 1927

LEON SLOSS SCHOLAR

Sturgis McKinney Riddle (Lower Division).....Long Beach

LELAND STANFORD JUNIOR MEMORIAL SCHOLAR

Robert Arthur Hume (English).....Brookings, South Dakota
A.B., Stanford, 1929

STANFORD MOTHERS' CLUB SCHOLARS

[2]Helen Elizabeth Bailey (English).....Hollywood
[8]Albert Lyle Cook (Electrical Engineering).....Los Angeles
A.B., Stanford, 1928, Engineer, 1929
[1]Robert Starr Northrop, Jr. (Economics).....Napa
[1]John Orrick Palstine (Law).....Stanford University
A.B., Stanford, 1926, J.D., 1929
[8]Margaret Pierce (English).....Los Angeles

STANFORD RESIDENT ALUMNAE SCHOLAR

Helen Agatha Smith (History).....Portland, Oregon

STANFORD WOMEN'S CLUB OF SAN FRANCISCO SCHOLAR

[1]Gladys Louise Crofoot (Lower Division).....Oakland

STANFORD WOMEN'S CLUB OF LOS ANGELES SCHOLAR

Maxine Abbott Cushing (Political Science).....Hollywood

JOHN MAXSON STILLMAN SCHOLAR

[12]Samuel Stephens Kistler (Chemistry).....Stockton
A.B., Stanford, 1921, Engineer, 1922

PALMER WILKINSON TAYLOR SCHOLAR

[12]Ernest Giesecke (Lower Division).....Marble Falls, Texas

HARRY A. TRUE MEMORIAL SCHOLAR

David Ralph Malcolm (Economics—Accountancy).....Van Nuys

UNIVERSITY GRADUATE SCHOLARS

Carroll Baugh Andrews (Medicine).....San Fernando
A.B., Stanford, 1928
Howard Wilson Baker, Jr. (English).....Lindsay
A.B., Whittier, 1927; A.M., Stanford, 1928
Clara Rose Brecher (English).....San Jose
A.B., Stanford, 1928
Frank Bernard Carroll (Law).....San Jose
A.B., Stanford, 1928
Donald Langer Cherry (History).....Santa Cruz
A.B., Stanford, 1928, A.M., 1929
William Fred Cottrell (Political Science).....Palo Alto
A.B., Occidental, 1925; A.M., Stanford, 1929
[12]Barbara Constance Dewlaney (Sch. of Soc. Sc.—Journalism)...Palo Alto
A.B., Stanford, 1927, A.M., 1929
Benjamin Cushing Duniway (Law).....Northfield, Minnesota
A.B., Carleton, 1928
[8]Elvira Alida Erickson (School of Business).....Weed
A.B., Stanford, 1928

Miriam Kathleen Forrester (English)....Palo Alto
A.B., Oregon, 1927; A.M., Stanford, 1928

David Hyrum Fuhriman (School of Business)....Providence, Utah
B.S., Utah Agricultural, 1926; M.B.A., Stanford, 1929

Douglas Raymond Fuller (School of Business)....Stockton
A.B., Stanford, 1928

Joseph Blackburn Hill (Education)....Whittier
A.B., Stanford, 1928, A.M., 1929

Yam Tong Hoh (Education)....Palo Alto
A.B., Canton Christian College, 1923; A.M., Stanford, 1929

William George Hoover (School of Engineering)....San Mateo
A.B., Stanford, 1928, Engineer, 1929

John Bingham Hurlbut (Political Science)....Los Angeles
A.B., California at Los Angeles, 1928

Malcolm Nixon Jones (Medicine)....San Bernardino
A.B., Stanford, 1927

Hazel Hope Kelley (History)....Stockton
A.B., College of the Pacific, 1928; A.M., Stanford, 1929

Clarence Edward Lachele....Salem, Oregon
B.S., Oregon State Agricultural, 1922; A.M., Stanford, 1929

Lawrence Henry Lazarus (Chemistry)....Los Angeles
A.B., Stanford, 1928, A.M., 1929

[1]Paul Mahoney (Political Science)....Boston, Massachusetts
A.B., Stanford, 1929

[12]Donald George Marquis (Psychology)....Bellingham, Washington
A.B., Stanford, 1928

Donald Carlyon Marshall (Medicine)....Sunnyvale
A.B., Stanford, 1925

Camille Mermod (Medicine)....Palo Alto
A.B., Mills College, 1922

Nathaniel Richard Morgan (Electrical Engineering)....Palo Alto
A.B., Stanford, 1928, Engineer, 1929

Tsung Yuh Nyi (Law)....Soochow, China
A.B., Chih Tze, 1928; LL.B., Comparative Law School of China, 1928; J.D., Stanford, 1929

Robert Eliot Paradise (Law)....Los Angeles
A.B., Stanford, 1927, J.D., 1929

Charles Edward Smith (Medicine)....Sacramento
A.B., Stanford, 1927

George Edson P. Smith, Jr. (Chemistry)....Stanford University
B.S., Arizona, 1926

Loilor Jordan Snyder (Chemistry)....San Diego
A.B., Stanford, 1927, A.M., 1929

Harold Carleton Sox (Medicine)....Albany, Oregon
A.B., Oregon, 1927

Elmo Nall Stevenson (Education)....San Jose
A.B., San Jose State Teachers College, 1927; A.M., Stanford, 1929

Masao Matsumoto Suma (Political Science)....Hiroshima, Japan
A.B., Stanford, 1927, A.M., 1928

Hugo Wall (Political Science)....Palo Alto
A.B., Stanford, 1926

Phoebe Watkins Ward (English)....San Diego
A.B., Stanford, 1928

Edward Arthur White (History)....Los Angeles
A.B., Stanford, 1928

Sheldon Kessinger Wirt (French)....Long Beach
A.B., Stanford, 1928

Ira Eaton Wood (Electrical Engineering)....San Jose
A.B., Stanford, 1928, Engineer, 1929

HENRY WINDT JUNIOR MEMORIAL SCHOLAR

Dennistoun Wood, Jr. (Chemistry).....Palo Alto
A.B., Stanford, 1927, A.M., 1928

AWARDS AND PRIZES

IRENE HARDY PRIZE

Marshall Kirby (Philosophy).....Beverly Hills

WILLIAM ROBERTS ECKART PRIZE IN MECHANICAL ENGINEERING

William John Cope.....Salt Lake City, Utah
B.S., Utah, 1923; Engineer, Stanford, 1929

LOWER DIVISION HONORS

(Awarded on the basis of high scholastic attainment to approximately one-tenth of the students completing Lower Division requirements at the end of the summer, autumn, winter, and spring quarters.)

Louise Alice Artz
William Joseph Bardin
Howard Dean Beeman
Alice Maude Behner
William Sinclair Best
Robert Minge Brown
Walston Shepard Brown
Gilbert Lawrence Carr
Edwin Perry Churchill
Radcliffe Charles Clausen
Elizabeth Stuart Cooper
Marie Elizabeth Cummings
Theodore Mitchell DeMotte
Louise Josephine Dohrmann
Mona Bedortha Dutton
George Lockwood Eastman
Dixon Fagerberg, Jr.
Maurice Robert Friend
Gladys Leona Gillig
Charles Allan Hart, Jr.
Frederick Henry Hawkins, Jr.
Tokio Ishikawa
Katherine McCormick Keho
Donald Grant Kendall
Lawrence Alpheus Kimpton
Eric Christian William Krenz
Arthur Kroeger
George Albert Lazar, Jr.
Green Moren Lee
Walter Emile Letroadec
Duncan Douglas Low
Manson Fielding McCormick, Jr.
Carl Elliott McDowell
Margaret Aileen Main
Herbert Joseph Mayer
Wilfred Mujica
John Lincoln Nourse
John Higby Peck
John Rockwell Pedden
Mario Perelli-Minetti
Beth Tollan Pinkston
Maurice Strathallan Power
Henry Colwell Ramsey
George Alfred Reid
Mary Lee Richmond
Sturgis McKinney Riddle
James Morton Roberts
Richard Maury Sims, Jr.
Melvin Edward Smith
John Crayton Snyder
Howard Francis Spalding
Kathryn Teach
Robert Palmer Templeton
Dorothy Alma Ulrici
Clive Maples Warner
John Leroy Wilson
Harry Nathaniel Winton
Richard Ewing Wright
Dorothy Verges Zitkowski

STUDENTS

Name; home residence; major subject; status; University residence; postoffice. The capital letter following residence address indicates location of street (P = Palo Alto, M = Mayfield, MP = Menlo Park, SJ = San Jose, SF = San Francisco, etc.); where capital letter is omitted the residence in all cases is *Stanford University*. The small letter following the capital indicates the postoffice address; where small letter is omitted the postoffice in all cases is *Stanford University*. The numbers (or letters) in italics after the University address are Stanford University postoffice box numbers (or box letters).

Status—gr., graduate student; sp., special student. The figures after major subject indicate, first, the number of units of university work completed (and counting toward the 180 units required for graduation), no account being taken of "deferred," "incomplete," or "conditioned" work; second, the number of grade points in excess of, or falling short of, the number of registered units ("+20," in excess; "—20," deficient). Where two numbers (separated by a point) precede the plus or minus sign, the first indicates the number of units of advanced or other credit to which the grade-point system does not apply; thus 45·50+10 means that the total credit is 95 units, but that the +10 grade points are based upon the 50 units only.

The superior figure [1] indicates registration for the autumn quarter only; [2] indicates winter quarter only; [3] indicates spring quarter only; [4] indicates summer quarter only; [12] indicates autumn and winter quarters only; [23] indicates winter and spring quarters only; [13] indicates autumn and spring quarters only; [5] indicates autumn, winter, spring, and summer quarters.

The asterisk (*) indicates registered *in absentia;* the paragraph mark (¶) indicates registered under Independent Study Plan, credit deferred; the double dagger (‡) indicates unadjusted standing from other colleges and universities. (Phys. = Physics; Phyl. = Physiology.)

Aaron, Robert Hart	San Francisco	LD 45+20	306 Encina-*1642*
[1]Abbe, Ellis Russell A.B., Stanford, 1927	Palo Alto	Chem. gr.	527 Encina
[23]Abbott, Francese Vanelia	Compton	LD 57·25+28	100 Roble-*1694*
Abers, Jacob A.B., California at Los Angeles, 1927	Los Angeles	Engl. gr.	407 Waverley, P-p
[2*4]Abrams, Dorothy Elise A.B., Stanford, 1929	San Francisco	Phys.S. gr.	167 Roble-*1684*
Abrams, Margaret	Stanford Univ.	LD 43+31	338 Roble
[12]Abramson, J. Hilty	Lindsay	S.Engr. 5·148–12	Delta Upsilon
[4]Ackerman, Carol Frances	San Francisco	Engl. ‡ 8+2	359 Roble
Acres, Lawrence Hobbs A.B., Stanford, 1926	Los Angeles	Med. gr.	2402 California, SF-sf
[4]Acres, Stanley Edward A.B., San Jose State Teachers College, 1928	Sunnyvale	Educ. gr.	Sunnyvale-Box 334, s
[4]Adams, Arthur Raymond	Los Angeles	LD ‡	326 Union
[1]Adams, Claude H. B.S., Utah Agricultural, 1923; J.D., Stanford, 1929	Tremonton, Utah	Law gr.	134 Laurel, P-p
[1]Adams, Clement Earl A.B., San Jose State Teachers College, 1926	San Jose	Econ. gr.	720 Miller, SJ-sj
[2]Adams, David Snell A.B., Stanford, 1929	Woodland	Econ. 182+187	Kappa Sigma-*1326*
[2*4]Adams, Elmo W.	Las Vegas, Nevada	Geol. 123·29+20	520 Alvarado
Adams, Francis S.	Anaconda, Mont.	LD 7·43+24	208 Encina-*1766*
Adams, Frank Pollard	Piedmont	LD 88+64	Delta Tau Delta-*1363*
Adams, Henry Jackson	Fostoria, Ohio	Econ. 119+9	Zeta Psi-*B*
Adams, Herkimer Ernest	San Francisco	Econ. 140+29	Theta Xi
Adams, James Lyman A.B., Stanford, 1927, J.D., 1929	Long Beach	Law gr.	317 Union
Adams, Jane Elizabeth A.B., Stanford, 1924, A.M., 1925	San Diego	Educ. gr.	Madroño

Adams, J. Martin A.B., Stanford, 1926	Klamath Falls, Ore.	Med. gr.	2201 California, SF-sf
Adams, John Bucher	Fostoria, Ohio	LD 89–4	Zeta Psi-*B*
[5]Adams, Lewis Nelson	Aberdeen, Wash.	Chem. 120+54	Theta Chi
Adams, Margaret Grace A.B., Stanford, 1928	Los Altos	Ed.-G.A. gr.	Sigma Kappa-*1327*
[23]Adams, Marvin Osborne, Jr. A.B., Stanford, 1928	Los Altos	Econ. gr.	Los Altos-Box 105, la
[5]Adams, Richard Laban B.S., Massachusetts Agricultural, 1905	Berkeley	Econ. gr.	2427 Hilgard, B-b
Adams, Trerice Vivian A.B., Stanford, 1929	Riverside	Econ. 34·146+20	Phi Kappa Sigma
Addison, Carl Calvin B.S., Kansas, 1928; A.M., Stanford, 1929	Kansas City, Kans.	Geol. gr.	627 Homer, P-p
[4]Addleman, Sara Mae	San Francisco	LD ‡	Los Altos-la
[4]Addlestone, Howard Fred	San Francisco	LD ‡	215 Toyon
[12]Adelsbach, Cleo Garland A.B., Stanford, 1928	Visalia	Math. gr.	224 Union-*1714*
[4]Ades, Samuel Robert	San Francisco	LD	215 Toyon
[1]Adkins, John Nathaniel	Sacramento	LD 41+47	Mayfield-m
Adler, Richard Henry	Los Angeles	LD 45+55	23 Encina-*2106*
Adler, William Milton	Los Angeles	S.Engr.6·127+20	207 Branner-*2106*
Ahnefeldt, Elizabeth A.B., Stanford, 1929	Riverside	Psych. 90·93+95	319 Roble-*1782*
Aiken, Douglas Sedgwick	Palo Alto	Econ. 148+50	512 Governor's Ave.
[4]Aitken, Malcolm Darroch B.S., Montana State, 1922	Mt. View	Educ. gr.	1070 Calif., MV-mv
Aitken, Thomas D., Jr.	San Francisco	LD 45+74	330 Encina
[4]Akright, James Gladstone A.B., Kansas, 1922	Everett, Wash.	Educ. gr.	550 Salvatierra-*2391*
Alabaster, John Harlow A.B., Stanford, 1929	Riverside	Econ.16·165+1	Beta Theta Pi-*1335*
Albertson, H. Kendall	Los Angeles	S.Engr. 117+24	Zeta Psi-*B*
Albertson, Marcellus O.	Los Angeles	LD 71+7	Zeta Psi-*B*
[234]Albertson, Walter Edward	Healdsburg	Phys. 86·51+31	305 Lytton, P-p
Aldahl, Joyce E. A.B., Stanford, 1929	Long Beach	Phil. 185+23	Delta Upsilon
Alden, Elizabeth	Palo Alto	LD 84+46	427 Embarcadero, P-p
[1]Alderman, Merle Norton	Los Angeles	Econ.174·0–6	1740 N.Al'x'a,LA-la
[234]Aldwell, Eileen	Atherton	Cl.Lit. 42·42+34	234 Roble
[5]Aldwell, William Basil	Atherton	Germ.103+51	Ath.,MP-Bx382,mp
[12]Aleck, Joseph Francis A.B., Stanford, 1929	San Francisco	Econ.133·48+46	StanfordFireHall
d'Alessio, Wagner A.B., Stanford, 1929	Roseville	Econ. 5·184+245	242 Toyon-*2665*
[5]Alexander, Don Mynier	Hollywood	Econ. 92–4	634 Hamilton, P-p
[1]Alexander, John Birge	Oakland	LD	405 Encina-*2049*
[1]Allan, Keith Christie	Berkeley	LD 26–1	432 Encina
Allan, Robert Myers	Salida, Colo.	LD 44+60	138 Encina-*2483*
[124]Allen, Archibald William	Oakland	S.Let. 134+211	210 Toyon
Allen, Barbara	Portland, Ore.	LD 43+12	284 Roble-*72*
Allen, Craig Talmage	Phoenix, Ariz.	Econ. 90·43+0	451 Encina-*899*
Allen, Edward A.B., Stanford, 1929	Santa Maria	Chem. 94·92+37	206 Sequoia-*2371*
[12]Allen, Edyth Winifred A.B., Stanford, 1929	Palo Alto	Engl.-P.Sp.90·90+43	PiB.Ph.-*1918*

Allen, Frank Worthington Berkeley Chem.135·46+50 400Channing,P-p
A.B., Stanford, 1929
Allen, Fred Delwyn Lockeford Econ. 90·93+25 304 Union-*1857*
A.B., Stanford, 1929
[12]Allen, Harold K. Huntington Park LD 42+5 403 Encina
Allen, Harry Julian Los Angeles LD 46+14 208 Encina-*721*
Allen, Jesse Knight Provo, Utah S.Bus. gr. 504 University, P-p
B.S., Brigham Young, 1926
[234]Allen, Mark Knight Provo, Utah Psych. gr. 504 University, P-p
A.B., Brigham Young, 1926
[12]Allen, Ralph Woodford Seattle, Wash. LD 64+70 Delta Kappa Epsilon
Allen, Thomas Payne Olympia, Wash. LD 93+15 Theta Chi-*1383*
[23]Alley, Stuart Myron Suisun Span. 125+29 Kappa Alpha
Allred, W. Lyle Logan, Utah Med. gr. 2345 Washington, SF-sf
A.B., Brigham Young, 1909; A.M., Stanford, 1925, Ph.D., 1926
Almanzán, Roberto E. Los Angeles LD 2·79+13 746 Santa Ynez-*2176*
Ambrosius, John Merle Rockford, Ill. Econ. 90·41+2 Delta Chi-*1304*
Ament, Roger W. Beverly Hills LD 88+62 564 University, P-*2184*
[1]Ames, Elbert Nicholas San Mateo Econ. 180+29 Roblar, SM-sm
A.B., Stanford, 1929
[4]Ames, Fannie Orlina Willows Educ. gr. 660 Salvatierra
A.B., Colorado, 1913
[4]Ammons, Thelma Lee Delano Educ. ‡ 14+14 156 Roble
[4]Amsden, Maurice Ralph San Jose Chem.‡ 371 E.San Salvador,SJ-sj
Amyx, Dick Arlynn Niles LD 100+178 215 Sequoia-*1792*
[4]Andersen, Marie Selma Hist. ‡ P.A.-RFD 1, Box 230, p
Anderson, Albert Loutrel San Francisco Econ. 182+19 Theta Xi
A.B., Stanford, 1929
Anderson, Ben Taylor Oakland LD 92+62 911 Bryant, P-*883*
[234]Anderson, Donald E. Fresno Econ. 113+19 Phi Kappa Psi
Anderson, Donald Malcolm Irvington S.Engr.135·41–3 528Alv'r'do-*1132*
Anderson, Edward Gerald Santa Cruz Econ. 131–4 111 Toyon-*1855*
[14]Anderson, Fred T. A. Wilton, N.D. Chem. gr. 241 Central, SF-*593*
B.S., Minnesota, 1913
Anderson, George Kvelve, Jr. Hollywood Econ. 5·161+11 122 Toyon-*835*
[5]Anderson, H. Dewey Cupertino Educ. gr. Cpt.-Rt. A, Box 186, c
A.B., Stanford, 1929
Anderson, Harry Davey Weed LD 25+3 141 Encina
Anderson, Jewell Margaret Centerville LD 47+59 309 Roble-*2045*
[5]Anderson, Oscar Albin Palo Alto Educ. gr. 2779 Cowper, P-*1702*
A.B., Cornell College, 1921; A.M., Stanford, 1929
Anderson, Ronald Stone Palo Alto Soc.S. 180+248 PA-RD 1,Bx 9C,p
A.B., Stanford, 1929
[4]Anderson, Virgil A. Menlo Park Engl.-P.Sp. gr. 146 Prtg., MP-mp
A.B., Willamette, 1923
[5]Andreini, George Leslie Redwood City Hist. 75·69+0 426 Webster, RC-rc
Andreson, Everett Harlan Long Beach Ec.-Ac. 103·77+47 252 Ev't,P-*1326*
A.B., Stanford, 1929
Andrews,Carroll Baugh Monterey Med. gr. 1918 Webster, SF-sf
A.B., Stanford, 1928
Andrews, Chester Richard Palo Alto Law gr. 1919 Emerson,P-Bx147,p
A.B., Stanford, 1927, J.D., 1929
[4]Andrews, Dorothy Adele Sacramento Educ. 67·40+39 Roble
Andrews, John Norman Palo Alto Pol.S. 187+108 478 Calif., M-m
A.B., Stanford, 1929
[7]Andrews, Russell Phillips Palo Alto Educ. gr. 628 Cowper, P-p
A.B., Stanford, 1928

Angel, Arthur Desko	Pomona	Pol.S. 144+113	210 Branner
[4]Angelman, Jack Dupré	San Francisco	LD	119 Toyon-*1335*
Angus, Robert Henry	Yorkshire, England	E.E. gr.	5 Union-*1094*
A.B., Cambridge, 1926; Engineer, Stanford, 1929			
[5]Anixter, Simon David	San Francisco	Law gr.	759 Middlefield, P-p
A.B., California, 1927			
[4]Annand, Robert Nathaniel	Delta, Colo.	Educ. gr.	432 Hawthorne, P-p
A.B., Denver, 1924			
Annin, Clarence Russell	Wasco	Educ. gr.	Menlo School, MP-mp
A.B., Santa Barbara State Teachers College, 1928			
Anthony, Berkeley F.	San Francisco	LD 41+2	315 Encina-*1614*
Antonell, Emil Brackett	Phoenix, Ariz.	Pre-Med.11-147+17	355 Enc.-*1326*
[12]Ao, Sen	Kiangsu, China	Law gr.	432 Hawthorne, P-*886*
A.B., Shanghai, 1927; LL.B., Comparative Law School of China, 1928			
[5]Applegarth, Norman William	Palo Alto	Law gr.	435 Hamilton, P-p
A.B., Stanford, 1928			
Appleton, Lawrence Alfred	San Jose	Econ.90-62+52	1680Alameda,SJ-sj
[4]Arata, Dena Kathryn	Fulton	Educ. ‡	367 Roble
Armes, Jean Marie	San Francisco	LD 96+5	Alpha Phi-*1387*
[1]Armitage, Richard B.	Yakima, Wash.	Hist. 60-120+30	Delta Chi-*1304*
A.B., Stanford, 1929			
[5]Armour, Merrill Augustus	Palo Alto	Law gr.	903 Ramona, P-p
A.B., Stanford, 1926			
[24]Armstrong, Edward Dow	Hercules	Chem. 46-111–19	403 Encina-*527*
Armstrong, William M.	Duncan, Okla.	S.Engr. 90-41+0	253 Everett, P-p
[3]Arnold, Ethel May	Manhattan, Kans.	Ed.-G.A. gr.	671 Santa Ynez
B.S., Kansas State Agricultural, 1918; A.M., Chicago, 1925			
[1]Arnold, Lewis Moffett	San Francisco	LD 4–9	304 Encina-*962*
Arnstein, Richard	San Francisco	Econ. 180+30	436 Wav'ley, P-*1771*
A.B., Stanford, 1929			
[23]Arthur, Albert Keyston	San Mateo	LD 31+13	115 Encina
Arthur, James Henry	New York, N.Y.	LD 42+68	327 Encina-*837*
Artman, Corwin Walter	Long Beach	LD 118+73	Phi Kappa Psi
[4]Artman, William Vaux	Long Beach	LD	226 Union-*613*
Artz, Louise Alice	Tustin	LD 94+120	Delta Gamma-*1366*
[1]Asakura, Takzumi Taki	Santa Barbara	Econ. 90-93+9	Japanese Club-*598*
A.B., Stanford, 1929			
[12]Asbury, Francis, Jr.	Long Beach	LD 84+20	307 Sequoia-*2139*
Ashby, Waldo	Oakland	Econ. 180+20	Kappa Sigma-*1326*
A.B., Stanford, 1929			
Ashworth, William	Santa Barbara	Engl. gr.	669 Mirada-*2674*
A.B., Dartmouth, 1909; A.M., Stanford, 1922			
Asmann, John H.	Cincinnati, Ohio	LD 87+65	Theta Chi-*1383*
Asquith, Richard Lionel	San Francisco	LD 17-50+40	126 Encina
[2]*Atcheson, Douglas	Redwood City	LD 49+30	Redwood City-*851*
Atkinson, Ray Cook	San Francisco	Med. gr.	2180 Washington, SF-sf
A.B., Stanford, 1927			
Atkisson, E. James, Jr.	Sanger	LD 38+19	20 Encina-*1906*
Atlas, Irving	San Jose	LD 45+33	66 Atlas, SJ-sj
[1]Attwood, Cyril John	Centerville	Educ. gr.	Centerville-Box 183, c
A.B., Stanford, 1927			
Atwill, John Richard	San Gabriel	Law gr.	653 Cabrillo-*2189*
A.B., Stanford, 1928			
[4]Austin, Lloyd James	Moccasin, Mont.	Educ. gr.	Mayfield-*2216*
B.S., Utah Agricultural, 1925			
Austin, Spencer Trageser	Santa Monica	LD 88+17	217 Branner-*2134*
Avary, Edwin Davis	San Francisco	LD 47+17	329 Encina-*2166*

Avery, Kenneth Gilcrest	Pasadena	LD 47+2	126 Encina-*1841*
Avery, Paul Walker, Jr.	Palo Alto	LD 84+0	151 Embarcadero, P-p
[5]Avila, Pablo	Costa Mesa	LD 47+38	40 Encina-*1754*
[1234]Avilla, Leonard Ray A.B., Stanford, 1925	Hughson	Law gr.	567 Lincoln, P-*856*
[124]Ayars, Robert Needham	Glendale	S.Engr.122+116	236 Branner-*1517*
[1]Ayres, Elliott H.	Palo Alto	Econ.10·160+108	826H'm'r,P-*2578*
Azevedo, Joseph Leo, Jr. A.B., Stanford, 1929	Palo Alto	S.Biol. gr.	345 High, P-p
[1]Babcock, Franklin C.E., Rensselaer Polytechnic, 1907	San Francisco	S.Bus. gr.	Presidio, SF-sf
Babson, Edmund Chapman	Portland, Ore.	S.Engr. 147+188	Theta Xi
[4]Bachmann, John Herbert A.B., Kansas, 1909; A.M., Northwestern, 1910	Modesto	Span. gr.	759 Webster, P-p
[4]Backman, Ralph Vernon A.B., Utah, 1926	Salt Lake City, U.	Phil. gr.	306 Toyon
Bacon, Harold Maile A.B., Stanford, 1928, A.M., 1929	Los Angeles	Math. gr.	565 Lasuen-*1144*
Badcon, Sidney Dee A.B., Stanford, 1929	Ogden, Utah	Econ. 180+75	160 Kellogg, P-p
[4]Bagai, Modi Mohan	San Francisco	LD	130 Encina
[4]Bagley, Kathleen Rita	San Francisco	LD ‡	130 Encina
Bagley, Phillip Haber	Fresno	LD 102+16	410 Encina-*604*
Bailey, Babette Frances A.B., Stanford, 1929	Honolulu, T.H.	Psych. gr.	Gam. Phi Beta-*1337*
[12]Bailey, Helen Elizabeth	Hollywood	Engl. 123+101	Sigma Kappa-*1327*
[4]Bailey, Iva Mae A.B., Colorado State Teachers College, 1926	Pixley	Psych. gr.	Turpin Hotel, SF-sf
Bailey, Lois Ruth	Palo Alto	LD 47+78	168 Waverley, P-p
Bailey, Wilbur P. A.B., Stanford, 1926	San Francisco	Med. gr.	2802 Clay, SF-sf
Baily, Joseph	Spokane, Wash.	LD 94+69	421 Kipling, P-p
[1]Baird, J. Malcolm A.B., Stanford, 1929	Fresno	Soc.S. 90·91+27	506 Mayfield-*2541*
Bairos, Cyril Anthony A.B., Stanford, 1929	Pleasanton	S.Engr.188+135	104 Branner-*2263*
[4]Baker, Auril Theodora A.B., College of the Pacific, 1927	Antioch	Engl. gr.	353 Lytton, P-*135*
Baker, Burton A.B., Stanford, 1929	Oconomowoc, Wis.	Pol.S. 90·90+81	692 Mirada
Baker, C. Everett	Long Beach	LD 80+21	206 Sequoia-*1966*
[4]Baker, Harriet M. A.B., Kalamazoo, 1923	Pacific Grove	S.Biol. gr.	104 Fountain, PG-pg
Baker, Howard Wilson, Jr. A.B., Whittier, 1927; A.M., Stanford, 1928	Lindsay	Engl. gr.	333 Waverley, P-*1514*
[5]Baker, Hugh Cheney A.B., Stanford, 1928	Antioch	Engl. gr.	330 Waverley, P-*135*
[4]Baker, Lillian Dale A.B., San Jose State Teachers College, 1927	San Jose	Educ. gr.	593 Salvatierra
Baker, Lyman Philip	Watsonville	LD 45+37	221 Encina-*1944*
[4]Baker, N. Anderson B.S., Oregon, 1923	Portland, Ore.	Educ. gr.	436 Waverley, P-p
[4]Baker, Paul Everett A.B., Oregon, 1916; A.M., California, 1922	Kerman	Educ. gr.	436 Waverley, P-p
[5]Baker, Ralph Owen B.S., Oregon State Agricultural, 1925	Palo Alto	S.Biol. gr.	336 Homer, P-p
Baker, R. Frank A.B., Stanford, 1928	Osage, Iowa	Law gr.	415 Encina-*1357*

[5]Balabanis, Homer Paul Ph.B., Chicago, 1920, A.M., 1923	Mayfield	Econ. gr.	1256 College, M-m
[5]Balch, Mary Frances	Los Gatos	Geol. 92·41+31	269 Roble-*1633*
[12]Balch, Robert Taylor	Santa Monica	LD 17–23	139 Encina-*1572*
[4]Balcomb, Ernest Elwell A.B., Stanford, 1903	Etna	Educ. gr.	1611 College, M-*562*
Balcomb, Jean Bart A.B., Stanford, 1929	Palo Alto	M.E. 45·168+54	335 Everett, P-p
[4]Baldwin, Ernest Joy B.S., Kansas, 1915, M.S., 1917	Pocatello, Idaho	Chem. gr.	Stanford Univ.-*554*
Baldwin, Mary-Catherine A.B., Stanford, 1927	Riverside	Med. gr.	3099 Washington, SF-sf
[3]Ball, Calvin Arland A.B., Chico State Teachers College, 1929	Etna	Educ. gr.	611 Waverley, P-p
Ball, George Francis	Fresno	Econ. 24·142+87	308 Branner-*2215*
[1]Ballagh, Ehrnest E., Jr.	Maricopa	LD 91–13	237 Branner-*1267*
[12]Ballard, Eaton Walling	Seattle, Wash.	LD 29+21	124 Encina-*2826*
[4]Ballard, Modrel Moffett A.B., Baylor, 1920; A.M., Stanford, 1925	Abilene, Texas	Span. gr.	2309 El Cm. Rl., M-*902*
[4]Ballif Serge C. A.B., Brigham Young, 1927	Preston, Idaho	Fr. gr.	1168 College, M-m
Ballin, Richard M.	Los Gatos	Engl. 90·46–8	207 Sequoia-*887*
[12]Ballis, William Belcher A.B., Stanford, 1929	Portland, Ore.	Pol.S. 183+240	124 Toyon-*642*
[1]Bancroft, Anne J.	Walnut Creek	Hist. 150–2	328 Roble-*1954*
Bancroft, Hubert Howe	San Diego	LD 35–2	228 Encina-*2441*
[5]Bancroft, Martin Flaherty A.B., Stanford, 1929	Walnut Creek	Anat. gr.	1001 Ramona, P-*1326*
Bannard, Louis Otto	Sawtelle	LD 45+32	345 Encina-*588*
[4]Banta, Donald Marion A.B., Spokane, 1920; M.S., Idaho, 1925	Santa Cruz	Engl. gr.	333 Waverley, P-p
Bantle, Joseph E. Graduate, Köln, 1926	Sigmaringen, Germany	Econ. gr.	824 University, P-*1258*
Barbee, Elizabeth Lee	Long Beach	LD 46·46+24	257 Roble-*2606*
Barber, Willard F. A.B., Stanford, 1928, A.M., 1929	Albuquerque, N.M.	Pol.S. gr.	263 Lytton, P-p
Barbour, Jack Meux	Fresno	Econ. 129+0	Delta Kappa Epsilon
[23]Bardin, Jim G.	Salinas	Econ.109+55	Phi Sigma Kap.-*538*
Bardin, William Joseph	Salinas	S.Engr.137+220	Phi Sig. Kap.-*538*
[5]Barger, Justus Wheeler B.S., Kansas State Agricultural, 1922, M.S., 1923; A.M., Stanford, 1929	Bozeman, Mont.	Econ. gr.	222 Union-*2115*
[124]Bark, William Carroll	Tacoma, Wash.	LD 77+102	SigmaAlphaEps.-*1305*
[12]Barker, C. Omar, Jr. A.B., Stanford, 1929	Banning	Econ. 83·98+2	238 Toyon-*889*
[27]Barker, Edna Lizabeth	San Francisco	LD 29+27	223 Roble-*635*
[234]Barker,Gertrude Barbour	San Francisco	Bact. 90·30+31	1346 Pine, SF-sf
[12]Barker, Guy, Jr.	Palo Alto	LD 74+70	208 Escobita, P-p
[5]Barker, H. Albert	Palo Alto	Phys.S.178+304	633 Hamilton,P-p
Barker, Harry Edwin	Ventura	Zoöl. 179+135	403 Sequoia-*1641*
Barker, Roger Garlock A.B., Stanford, 1928	Palo Alto	Psych. gr.	208 Escobita, P-p
Barker, Wallace Woodward A.B., Harvard, 1905	Palo Alto	Fr. gr.	524 Middlefield, P-p
Barks, William George	Monrovia	LD 96+3	Phi Delta Theta
[5]Barksdale, Julian D.	Beaumont, Tex.	Geol. 93·45+62	305 Sequoia-*2311*
Barmore, Mark A. A.B., Whittier, 1927; A.M., Stanford, 1929	Whittier	Chem. gr.	226 Union-*1262*

Barmore, Merrill G. A.B., Whittier, 1925	Whittier	Med. gr.	2401 Sacramento, SF-sf
Barnes, Paul Stanton	New York, N.Y.	Econ. 130+13	Theta Chi-*1383*
Barnett, Blonch Ellen A.B., Stanford, 1929	Eloy, Ariz.	Span.204+252	Gam.Phi Beta-*1337*
Barnett, Thomas C. A.B., Stanford, 1929	San Jose	Phil. 180+52	124 Toyon-*2001*
[1234]Barr, James Adam, Jr.	Berkeley	Pre-Med.141+160	215 Toyon-*2223*
[24]Barre, Benjamin Alfred A.B., Stanford, 1929	Los Angeles	Econ. 135·46+16	213 Union-*2601*
[5]Barrett, Dallas Leslie A.B., Stanford, 1923	Palo Alto	Law gr.	1832 Cowper, P-p
[5]Barrett, Fenton Avery	Long Beach	Pol.S. 174+60	Kappa Sigma-*1326*
[4]Barry, Edwin Fry B.S., Alabama Polytechnic, 1914	Marshall, Tex.	M.E. gr.	750 Forest, P-p
Barry, John Evarts A.B., Stanford, 1929	Los Angeles	Hist. 180+31	Phi Delta Theta
Barstow, Alfred Gary	Alhambra	LD 90+20	659 Salvatierra
Barstow, Mary Rhodes A.B., Stanford, 1929	Alhambra	Pol.S. 9·179+122	Kap.Kap.Gamma
Barsumian, Herbert	Evanston, Ill.	LD 38–9	235 Encina-*2527*
[1]Bartlett, Alan	Piedmont	LD 16+21	409 Encina
Bartlett, Aurelius Twombley	St.Louis,Mo.	LD 40–1	127 Encina-*1726*
Bartlett, Leonard Irving	Modesto	Soc.S.-Jn.90·38+25	212 Brnr.-*2581*
Bartlett, Lowell Edgar A.B., Stanford, 1929	Ontario	Pol.S. 90·96+86	238 Branner-*2002*
Bartlett, Muriel de Fontenay	Berkeley	LD 15·87+55	Delta Gamma-*1366*
[12]Barton, Lois Elaine A.B., San Jose State Teachers College, 1928	San Jose	Chem. gr.	310 S. 10th, SJ-sj
Basham, Merle A.B., Stanford, 1929	San Mateo	Pol.S.130·55+22	819Jefsn.,SM-sm
Baskerville, Charles Dalton	Los Angeles	Econ. 62·76+31	Kappa Sigma-*1326*
[234]Bass, Thomas J., Jr.	San Francisco	Math. 90·27+11	425 Encina-*2516*
[4]Batchelder, Henry Hadley A.B., Santa Barbara State Teachers College, 1927	San Diego	Educ. gr.	105 Encina
Bates, Francis, Jr.	Los Angeles	LD 46+33	205 Encina-*1457*
Bates, Margaret Kathryn A.B., Stanford, 1928, A.M., 1929	Corvallis, Ore.	Math. gr.	344 Roble-*2643*
Bates, W. Bernarr	Santa Monica	LD 45+61	21 Encina-*2301*
Batman, La Vern R.	Grants Pass, Ore.	LD 46+21	106 Encina
[12]Bauer, Aural F.	Orange	LD 52+71	214 Roble-*653*
Bauer, Karl Hermann	Elmhurst, Ill.	Germ. 65·39+15	120 Encina-*2607*
Baum, Robert Frederick A.B., Stanford, 1929	Redwood City	S.Engr.180+8	126 Warwick,RC-rc
[4]Bauman, Frank A. A.B., Olivet, 1914	Orosi	Educ. gr.	Palo Alto-R 1, Bx 451,p
§[12]Baumann, James Osgood A.B., California, 1928	Saratoga	Econ. gr.	425 Encina-*103*
[4]Baumeister, Bernhardt E. A.B., San Jose State Teachers College, 1929	San Francisco	Educ. gr.	1121 Bryant, P-p
[12]Baumgarten, Robert Eric	Los Angeles	LD 78+81	Alpha Delta Phi-*J*
[4]Baxter, Cleland F.	Upland	Econ.31·155–4	Beta Theta Pi-*1335*
[4]Baxter, Philip Norman A.B., Stanford, 1925	Stockton	Pre-Med. gr.	221 Toyon
[4]Baxter, Robert Harold	Los Altos	LD	Los Altos-la

§ Deceased, January 26, 1929.

[1]Bayer, Nicholas Serge — Palo Alto — LD 88–27 — 627 Emerson, P-p
[5]Beach, Allen — Stanford Univ. — Educ. 65·41+11 — 521 Salvat'ra-*128*
Bean, Albert Victor — San Jose — Econ. 105·63–1 — 1021 Univ., SJ-sj
[24]Beard, John Winter — Palo Alto — Econ. 94–10 — 510 University, P-p
Beard, Paul Jay — Ames, Iowa — Bact. gr. — 530 Webster, P-p
B.S., Iowa State Agricultural, 1925, M.S., 1927; Ph.D., Stanford, 1929
Beard, Rodney Rau — Berkeley — LD 45+39 — 109 Encina-*1732*
[5]Beardslee, Robert Lewis, Jr. — Stockton — Law gr. — 564 Encina-*1468*
A.B., Stanford, 1927
Beattie, Clay Hathaway — Covina — S.Engr. 122+19 — Theta Xi
[4]Beck, Aileen Marie — Petaluma — Educ. gr. — 553 Salvatierra
A.B., Stanford, 1927
[4]Beck, Lester Fred — Ashland, Ore. — Psych. 67· — 306 Union
Beck, Paul Ralph — Centerville, Iowa — Soc.S.-Jn.135·46+13 — 306 Un.-*2664*
A.B., Stanford, 1929
Becker, Walter Nicholas — Sacramento — Med. gr. — 1214 Masonic, SF-sf
A.B., Stanford, 1928
Beckerley, William Gwavas — Oakland — S.Engr. 107·93+99 — 323 Union-*2731*
A.B., Stanford, 1929
[12]Beckner, Albert C. — Dallas, Texas — Hist.62–25 — 750Bryant,P-Bx1003,p
Bedford, Dan Vale — Los Angeles — LD 44+81 — 205 Encina-*676*
Bedford, Thomas Archibald — Berkeley — LD 88+44 — 249 Branner-*2665*
Bednar, James Edmund, Jr. — Omaha, Neb. — LD 47+71 — 111 Encina-*2561*
Bedwell, Loring Eugene,Jr. — Portland,Ore. — LD 44+3 — 327 Lytton, P-p
[4]Beede, Ruth May — Antioch — Soc.S. ‡ — Roble
[4]Beem, Grace Anita — Fort Jones — Hist. ‡ — Roble-*1175*
Beeman, Donald Lester — Woodland — S.Engr.94·88+105 — 171 Em.,P-*2593*
A.B., Stanford, 1929
Beeman, Howard Dean — Woodland — S.Engr.114+156 — 171Emsn.,P-*2593*
Beemer, H. Lawrence — Santa Maria — Soc.S. 181+6 — DeltaTauDelta-*1363*
A.B., Stanford, 1929
Beermann, Paul — San Diego — C.E. gr. — 604 Gilman, P-p
B.S., Southern California, 1926; Engineer, Stanford, 1929
Behner, Alice Maud — Glasgow, Mont. — LD 104+182 — 202 Roble-*2496*
Behnke, Albert Richard — Rivera — Med. gr. — St. Mary's Hosp., SF-sf
A.B., Whittier, 1925
[1]Behnke, Herbert Adolf — Rivera — Law gr. — 436 Waverley, P-*1114*
A.B., Stanford, 1928
Belden, George Whitfield — Fredonia, N.Y. — Zoöl. gr. — Menlo School, MP-mp
B.S., Cornell, 1927
[23]Belding, Clifford William — Costa Mesa — LD 27+4 — 109 Encina-*1924*
[5]Bell, Danily Clarence — San Anselmo — Hist. 163+105 — Chi Psi-*1648*
[12]Bell, Fred Charles — Eureka — LD 58+32 — 219 Sequoia-*2135*
Bell, Helen Elizabeth — Los Angeles — Engl.183+178 — Kappa Alpha Theta
A.B., Stanford, 1929
[4]Bell, Morlin Elwyn — San Jose — Engl.-P.Sp. gr. — 672 N. 1st, SJ-sj
A.B., San Jose State Teachers College, 1928
Bell, Reginald — Mayfield — Educ. gr. — Roble Ridge, M-*2013*
A.B., Oberlin, 1916; A.M., Stanford, 1928
[5]Bell, Robert Henry — Pecos, Tex. — Chem. 132+51 — 201 Toyon-*2668*
[5]Bellows, George Kingsley — Point Loma — Econ. 166+49 — Chi Psi-*1648*
Bendetson, Karl R. — Aberdeen, Wash. — Pol.S. 5·178+59 — Kingscote-*2209*
A.B., Stanford, 1929
Benedict, Gertrude E. — Brockport, N.Y. — S.Bus. gr. — 450 El Escarpado
A.B., Smith, 1926; A.M., Stanford, 1928
[4]Benedict, Howard L. — Los Angeles — Educ. gr. — 170 Tasso, P-p
A.B., Arizona, 1923

Bennett, Dudley Gates	San Francisco	LD 55+36	306 Encina-*863*
[1]Bennett, John Lutz	Oakland	LD 14+6	344 Serra-*1295*
[4]Bennetts, Elsie Hambly	Fresno	LD ‡	323 Roble-*1025*
[2]Bennigen, Kenneth J.	Fort Wayne, Ind.	LD 36–26	22 Fremont, MP-*1423*
Benninger, Edgar Robley	San Francisco	S.Engr.119+65	Del.Tau Del.-*1363*
[1]Benom, Harold Israel	Los Angeles	S.Bus. gr.	1027 Bryant, P-p
Ed.B., California at Los Angeles, 1924			
[4]Benson, Albert Niles	San Leandro	Educ. gr.	996 Dutton, SL-sl
A.B., Stanford, 1927			
[5]Benson, Harry Ray	San Diego	Educ. gr.	Menlo Park-Bx 573, mp
A.B., Hanover, 1927			
[12]Benson, Lyman	Kelseyville	S.Biol. 117+144	138 Branner-*1196*
[5]Benson, Richard	San Mateo	Educ. gr.	221 Grand, SM-*1260*
B.S., Oregon State Agricultural, 1925; A.M., Washington, 1925			
[124]Bent, Deborah F.	Pasadena	LD 85+5	Kappa Kappa Gamma
[4]Bentley, Bryon Robert	Milton, Mass.	Educ. gr.	217 Toyon-*1053*
A.B., Harvard, 1920, LL.B., 1925			
Bentzien, Forrest Llewellyn	Santa Clara	Pol.S.36·130+19	1651Lextn.,SC-sc
Berendsen, Gordon	San Francisco	Soc.S. 57·59–11	204 Encina-*1683*
Berg, Harry Clinton	Stockton	Pol.S. 135+96	Zeta Psi-*B*
[1]Berg, Julius Peter	Astoria, Ore.	LD 14+5	106 Encina-*2732*
Bergstrom, George Edwin	Los Angeles	LD 45+32	326 Encina-*1577*
Bering, Barry F.	San Francisco	Math. gr.	557 Encina-*2161*
A.B., Stanford, 1926, A.M., 1929			
Bering, Keith Everton	San Francisco	LD 91+28	557 Encina-*2161*
[23]Berman, Daniel	New York, N.Y.	Phys. gr.	541 San Juan-*1100*
A.B., Columbia, 1926			
[1]Bermudez, Domingo T.	La Union, P.I.	Pol.S.135·33–23	354 Seale, P-*1058*
Bernhard, Lazare Fred	Los Angeles	Pol.S. 183+156	232 Branner-*1903*
A.B., Stanford, 1929			
Bernhauer, Arthur Claude	Fresno	LD 44+31	231 Encina-*1145*
[5]Bernreuter, Robert Gibbon	Daly City	Psych. gr.	303 Union-*1731*
A.B., College of the Pacific, 1924			
[4]Berry, James Halford	San Jose	Educ. gr.	195 N. Autumn, SJ-sj
A.B., Baker, 1912; A.M., Columbia, 1925			
Berry, John Wesley	Oakdale	Chem. 90·46+11	417 Encina-*2668*
Berry, Kenneth Charles	San Francisco	Econ. 180+61	Phi Kappa Psi
A.B., Stanford, 1929			
[4]Berry, Nancy Jane	Palo Alto	Educ. gr.	853 Channing, P-p
A.B., California, 1922			
Berryman, Waldo Boyd	Palo Alto	LD 77+66	558 Lincoln, P-p
Best, William Sinclair	Altadena	LD 91+131	Phi Delta Theta
Betteley, Alfred B.	Valparaiso, Chile	LD 44+27	138 Encina-*1259*
[4]Bettencourt, Aurora C.	Centerville	Educ. gr.	134 Tasso, P-p
A.B., San Jose State Teachers College, 1927			
Bettman, Gerald L.	San Francisco	S.Engr. 97+16	212 Toyon-*2811*
[4]Betts, Dorothea Dyck	Palo Alto	Engl. gr.	661 Gilman, P-p
A.B., LaVerne, 1926			
[4]Betts, Gilbert Lee	Miami, Ariz.	Educ. gr.	661 Gilman, P-p
B.S., McPherson, 1921; A.M., Stanford, 1927			
Beverstock, Roswell	Los Angeles	LD 88+73	416 Encina-*1230*
Biaggini, Albert	San Jose	Educ. gr.	Delta Chi-*1304*
A.B., Stanford, 1928, A.M., 1929			
[5]Bianchi, Fred August	Ventura	Zoöl. 136+63	762 Dolores-*935*
Bibee, James De Von	Southgate	Econ.90·49+7	329 Hawthorne, P-p
[4]Biby, John Edward, Jr.	Los Angeles	LD	323 Union
[3]Bierer, Everard	Salt Lake City, U.	Chem. gr.	437 Encina-*56*
A.B., Stanford, 1928			

Biggs, Warren — Los Angeles — LD 49+44 — 305 Encina-*1441*

Bigler, Alexander Bowman — Santa Maria — Med. gr. — 2180 Washington, SF-sf
A.B., Stanford, 1926

[234]Bigotti, Richard Thomas — San Jose — Phyl. 95·32+1 — 425 Encina

Bilafer, Robert Anthony — San Francisco — S.Biol. 109·81+0 — 365 Guinda, P-p

[12]Bill, Philip Ross — San Francisco — LD 24–22 — 207 Encina

Billig, Harvey Ellsworth — Long Beach — Med. gr. — 2325 Sacramento, SF-sf
A.B., Stanford, 1928

Bing, Dana Gerald — Berkeley — LD 115+109 — PhiSigma Kappa-*538*

Bingham, Ernest Samuel — San Francisco — LD 41–16 — 332 Encina-*2009*

Binkley, Charles Herbert — Cobb — Chem. gr. — 406 Sequoia-*1245*
A.B., Stanford, 1928

[1]Binkley, Francis Alexander — Cobb — LD 46–14 — 108 Sequoia-*1245*

Binkley, John Bernard — Cobb — LD 94+62 — 208 Sequoia-*1245*

[5]Birch, Harry DeGray — Sausalito — Econ. 163+66 — Theta Xi

[4]Bird, Kenneth Leslie — Des Moines, Iowa — Chem. gr. — Hotel Ramona, P-p
A.B., Drake, 1921; M.S., Iowa State, 1923

[4]Birt, Elizabeth — Piedmont — LD ‡ — 162 Roble-*1244*

Bisbee, Orrin William — Heppner, Ore. — LD 45+90 — 244 Encina-*611*

Bisceglia, Gabriel Angelo — San Jose — Econ. 141+80 — 238 Branner

[2]Bishop, Beatrice Isabella — Sunnyvale — LD 30+44 — Sunnyvale-Box 587, s

Bishop, Eugene Carnes — Tigard, Ore. — LD 80+2 — 248 Branner-*2742*

[4]Bishop, Frank Edward — Tekamah, Neb. — Educ. gr. — Florence, MP-*847*
A.B., Nebraska Wesleyan, 1916

[4]Bishop, Henry Francis — Fresno — Educ. gr. — Los Altos-*1153*

Bishop, Jerome Holland, Jr. — Pasadena — Econ. 137+62 — Zeta Psi-*B*

[4]Bissell, Dwight Montgomery — Woodlake — Educ. gr. — 333 Lincoln, P-p
A.B., Fresno State Teachers College, 1926

[12]Bitterlin, Joseph François — Santa Monica — Econ. 180+196 — Phi Kappa Sigma
A.B., Stanford, 1929

[2]Bivens, Kenneth Chauncey — Ontario — Pre-Med.90·15+20 — 305 Lytton, P-p

[1]Bixby, Fred Hathaway, Jr. — Long Beach — LD 15+9 — 126 Encina-*2576*

Black, Alexander — San Francisco — LD 47–7 — Phi Kappa Psi

[2]Black, Arthur Whitwell — Denver, Colo. — LD 66+2 — 205 Emerson, P-p

Black, B. Marden — Oakland — LD 93+95 — Pacific Grove-pg

Black, Robert Mountjoy — Sacramento — Math.90·92+94 — Kappa Sigma-*1326*
A.B., Stanford, 1929

Black, William Carter — Hollywood — Pre-Clin.191+229 — 224 Toyon-*2294*
A.B., Stanford, 1929

[4]Black, William G. — New Westminster,B.C. — Educ. gr. — 17 Toyon
A.B., British Columbia, 1922; A.M., Chicago, 1926

[4]Blackburn, Richard Leroy — Tempe, Ariz. — Educ. gr. — 270 Kellogg, P-p
A.B., Washington, 1924, A.M., 1925

Blackford, James McNeal — Libby, Mont. — Law gr. — 302 Union-*2784*
A.B., Stanford, 1927

Blackman, Chester Wiggin — Alhambra — Engl. 4·135+175 — 138 Branner-*1424*

Blackman, Frank Otto — Coronado — Chem. 90·91+41 — 501 Encina-*1191*
A.B., Stanford, 1929

[4]Blackwelder, Alice G. — Stanford Univ. — LD — Escondite Cottage-*N*

Blackwelder, Martha Jean — Stanford Univ. — Cl.Lit.180+183 — Escond.Cottage-*N*
A.B., Stanford, 1929

Blackwelder, Richard E. — Stanford Univ. — LD 110+78 — Escondite Cottage-*N*

[12]Blair, Waddington — San Francisco — Educ. 22·176+112 — 229 Union-*1159*

[4]Blake, Merle Evelyn — Santa Cruz — Phyl. ‡ — 533 Lasuen

Blakely, George Opdycke — LaSalle, Ill. — Econ. 130·50+21 — Stanford U.-*584*
A.B., Stanford, 1929

[1]Blakemore, Arthur Shirley — SanFrancisco — LD sp. — 475 Brannan, SF-sf

[4]Blasingame, Marguerite L.L. Fresno Ed.-G.A. gr. 366 Roble
A.B., Hawaii, 1928
[4]Blethen, Howard Taylor, Jr. Los Gatos LD ‡ Los Gatos-Box 178, lg
[4]Blethen, Janet Crowley Los Gatos Cl.Lit. ‡ Los Gatos-lg
[4]Blichfeldt, Nora Anna Oakland LD ‡ *223* Roble-*2403*
Blinn, Robert Kuhls Alameda Pol.S. 139+162 *227* Branner-*1411*
[4]Blodgett, Charles O. Grand View, Ida. Educ. gr. 415 Pope, P-p
B.S., College of Idaho, 1927
[34]Blodgett, Harry Lyons Beverly Hills Soc.S. 112·15+3 535 Salvat'ra-*884*
[12]Blosser, Fred C. Fresno Law gr. WestCoastMil.Acad.,P-p
A.B., Stanford, 1925
Bluett, Albert Edward San Jose Law gr. 590 N. 21st, SJ-sj
A.B., Stanford, 1928
Blum, Jean Myron Los Angeles LD 92+6 131 Toyon-*1774*
[23]Blume, John August San Francisco LD 29+37 334 Encina-*2023*
Blumenthal, Emil L. Philipsburg, Mont. Med. gr. 2667 Derby, Berkeley-b
A.B., Stanford, 1927
Blythe, William Lucien Palo Alto S.Bus. gr. 381 Channing, P-p
A.B., Stanford, 1928
[4]Bobb, Arthur Earl San Jose Educ. gr. 395 S. 13th, SJ-sj
A.B., Stanford, 1926
Boden, William Estey Sacramento C.E. gr. 313 Sequoia-*581*
A.B., Stanford, 1928
Bodle, George Emery Boise, Idaho Hist. 140+53 Phi Gamma Delta
Bogen, Dorothy Carmel Engl.134+128 Alpha Omi. Pi-*1367*
[4]Bogert, Reid San Francisco LD ‡ 141 Toyon-*1123*
Boggs, Barbara Lee Kelseyville LD 48+65 311 Roble-*2316*
Bogue, Harris Dixon Burlingame LD 80+25 140 Toyon-*2668*
Böhm, Jack Earl San Francisco S.Biol. 90·91+2 1425 Alma, P-p
A.B., Stanford, 1929
Bolin, Rolf Ling Los Angeles Zoöl. gr. 150 17th St.,Pac.Grv.-pg
A.B., Utah, 1925; A.M., Stanford, 1929
[4]Bollinger, Fred Maurice Phoenix, Ariz. Hist. gr. Beta Theta Pi-*1335*
A.B., Southeast Missouri State Teachers College, 1927
[4]Bolton, Lucille Marie Fresno Educ. gr. Roble-*592*
A.B., Fresno State Teachers College, 1925
[4]Bolton, Mahlon Frank San Bernardino Engl. gr. 619 Waverley, P-p
A.B., Franklin and Marshall, 1914; A.M., Harvard, 1916
[34]Bolton, Robert Elmer Los Angeles Chem. gr. 502 Encina-*2473*
A.B., Stanford, 1927
[4]Bone, Finis Ewing Menlo Park Educ. gr. Menlo Park-Bx 770, mp
A.B., Occidental, 1927
[5]Bonn, Alice B. San Jose Educ. 90·51+99 161 Roble-*1156*
Bonn, Elizabeth Hayes Palo Alto Hist. 133+72 Alpha Phi-*1387*
Bonner, Charles Wolters Fresno LD 74+65 Zeta Psi-*B*
[4]Bonner, Linda Oldham Rusk, Texas Educ. gr. 349 Roble
A.B., Baylor, 1928
[4]Bonney, Holbrook Menlo Park Fr. gr. Menlo Junior Col., MP-mp
A.B., Amherst, 1908
[12]Booker, Don Raymond Dayton, Wash. LD 89–29 Theta Delta Chi-*1828*
[124]Boomer, Herbert H., Jr. Spokane,Wash. Econ.162+58 Alpha Tau Om.-*1384*
[5]Boone, Frances Elizabeth Palo Alto Engl.-P.Sp. gr. 430 Forest, P-p
A.B., Stanford, 1929
Boone, Thomas Harold Palo Alto Bact. gr. 430 Forest, P-p
A.B., Stanford, 1927
Booth, Frank Ewen El Segundo LD 47+36 316 Encina-*2362*
[4]Booth, Walter Bates Hollywood Law gr. Sigma Nu
A.B., Stanford, 1923

[12]Boothe, Dyas Power — Ceres — LD 84+23 — Delta Tau Delta-*1363*
Borden, Joseph Clarence — Palo Alto — Econ. 127+51 — 730 Bryant, P-p
Borden, Norman Clare — Paso Robles — LD 56+36 — 445 Encina-*1252*
Borley, William Edgar — Mishawaka, Ind. — Med. gr. — 2480 Washington, SF-sf
A.B., Stanford, 1927
Born, Maynard Robert — Burlingame — E.E. gr. — 139 Branner-*2492*
A.B., Stanford, 1929
Born, Ronald Henry — Burlingame — LD 42+12 — 122 Encina-*2492*
[15]Borthwick, Harry Alfred — Davis — Bot. gr. — University Farm, Davis-d
A.B., Stanford, 1921, A.M., 1924
Bosche, John Henry — Piedmont — LD 60+3 — Theta Chi-*1383*
Boscoe, Anthony R. — Stockton — Zoöl.-Med.81·102+37 — 509 Enc.-*844*
A.B., Stanford, 1929
Botasof, Isador Wolf — San Francisco — LD 49+62 — 122 Encina-*528*
Bothwell, James Latimer — Twin Falls, Ida. — LD 48+50 — 237 Encina-*1083*
[1]Bousquet, Alfred — San Francisco — LD 4–15 — 208 Encina
Bovard, Richard Husketh — Berkeley — LD 71–11 — 613 Salvatierra-*976*
[124]Bovet, Antoine Francis — San Mateo — Econ. 172+37 — Alpha Tau Omega
Bovet, Raymond C. — San Mateo — C.E. 192+124 — 145 Borel, SM-sm
A.B., Stanford, 1929
Bowen, Dorothy — Los Angeles — Engl. gr. — 340 Roble-*2177*
A.B., Stanford, 1927
Bowen, Lydia Spencer — Pasadena — Zoöl. 90·92+121 — 179 Roble-*2424*
A.B., Stanford, 1929
[1]Bower, Robert Sharon — Palo Alto — Econ. 100·80+10 — 603 Fulton, P-p
A.B., Stanford, 1929
Bowles, Vernon Orrin — Alameda — LD 91+56 — Phi Sigma Kappa-*538*
[4]Bowman, Carl Andrew — Arcata — Educ. gr. — 159 Emerson, P-p
B.S., Kansas State Teachers College, 1921; A.M., Northwestern, 1925
[4]Bowman, Leonard Leon — Santa Barbara — Educ. gr. — 159 Emerson, P-p
B.S., Kansas State Normal, 1921; A.M., Stanford, 1928
[18]Bown, Fred B. — San Diego — Econ. 46·84+29 — Sigma Nu-*1385*
Boyce, Lillian Elizabeth — Beverly Hills — LD 78+25 — Chi Omega
[1]Boyd, Robert Osborne — Stanford Univ. — Law gr. — 321 Union-*2473*
A.B., Amherst, 1926
Boyd, Thales Stewart — Gainesville, Fla. — Law gr. — 530 Webster, P-p
Graduate, U.S. Naval Academy, 1912; M.S., Columbia, 1921
Boyes, Joseph Harold — San Jose — Med. gr. — Lane Hosp., SF-sf
A.B., Stanford, 1926
Boyles, Edgar Amos — Sacramento — LD 62+59 — 125 Encina-*1012*
[4]Boynton, Elizabeth Ives — Santa Monica — Engl. ‡ — 341 Roble-*1223*
Boynton, Robert Davis — Palo Alto — E.E.gr. — 333SantaRita,P-Bx1032,p
A.B., Stanford, 1926, Engineer, 1927
[5]Bradford, Francis Harrison — Arbuckle — S.Engr. 79–4 — 227 Sequoia-*2497*
[4]Bradford, Lilah Clark — Portland, Ore. — Educ. gr. — 259 Roble-*1135*
A.B., Oregon, 1911
[5]Bradley, Harold Whitman — Claremont — Hist. gr. — 524 Webster, P-p
A.B., Pomona, 1925, A.M., 1926
[4]Bradley, John Howard — Modesto — Educ. gr. — 3408 El Camino Real, M
A.B., Fremont, 1910; A.M., North Dakota, 1918
[12]Bradshaw, Elizabeth Louise — Piedmont — LD 122+53 — Alpha Phi-*1387*
Bradshaw, Page — Berkeley — Hist. 42·138+207 — Chi Omega
A.B., Stanford, 1929
[1]Brady, John Morris — Ashland, Ore. — Law gr. — 429 Forest, P-*1093*
B.S., Oregon State Agricultural, 1924
[1]Brailsford, Frederick M. — Twin Falls, Ida. — LD 55–6 — 313 Toyon-*594*
[124]Brainerd, James Lamb — Menlo Park — Econ.93+10 — AlphaSigmaPhi-*1357*
Bramel, Hadley R. — Salt Lake City, Utah — S.Engr. 41·123+36 — Theta Xi

Bramkamp, Robert Greenleaf A.B., Stanford, 1926	Banning	Med. gr.	2180 Washington, SF-sf
[3]Bramlage, Julia A. A.B., California, 1922; A.M., Stanford, 1929	Porterville	Span. gr.	High Sch., Porterville-p
[1]Brand, Marguerite Galvin A.B., Whitman, 1928	Portland, Ore.	Engl. gr.	1641 California, M-*1844*
Brand, R. Romayne B.S., Oregon, 1926; A.M., Stanford, 1929	Portland, Ore.	Educ. gr.	1641 California, M-*1844*
[23]Brash, Sidney Herbert	San Francisco	LD 30+23	105 Encina-*1256*
Brayton, Margaret Rose A.B., Stanford, 1929	Roxbury, Mass.	Engl. 84·96+116	331 Roble-*1693*
[5]Brecher, C. Rose A.B., Stanford, 1928	San Jose	Engl. gr.	177 Roble-*822*
[4]Breckenridge, James L. A.B., Oberlin, 1908	Hood River, Ore.	Educ. gr.	820 Cowper, P-p
[5]Brem, Lorna A.B., Stanford, 1929	Los Angeles	Educ. gr.	Chi Omega
Brem, Thomas Hamilton	Los Angeles	LD 32+30	326 Encina-*987*
Brenan, Henton Sawyer	Redlands	LD 44+12	233 Encina-*1215*
[1]Brenner, Ralph Judson	Palo Alto	Ec.-Ac.39·125+69	1044 Ham'n,P-p
[2]Brett, Alice	Palo Alto	LD 20·30+40	1020 Bryant, P-p
[24]deBretteville, Alexander	San Francisco	LD 30+14	210 Encina
Breuer, Albert William	Burlingame	Hist. 137+72	565 Salvatierra
Breuer, Edward Otto	Burlingame	LD 100+61	565 Salvatierra
Brewster, Hughes A.B., Stanford, 1928	Dixon, Ill.	Law gr.	331 Encina-*2032*
Breyer, Irving Gerald A.B., Stanford, 1929	San Francisco	Phil. 69·116+66	500 Encina
Brickey, Raymond	Palo Alto	LD 46+47	1156 Hamilton, P-p
Bridges, Josiah Alston A.B., Stanford, 1929	Los Angeles	S.Engr.5·183+88	109 Sequoia-*2039*
Briggs, Henry Marshall	Hollister	LD 36–16	108 Encina-*1653*
Briggs, Janet	Santa Ana	LD 97+93	Sigma Kappa-*1327*
[4]Briggs, Mitchell Pirie A.M., Wisconsin, 1917	Fresno	Hist. gr.	348 Guinda, P-p
Briggs, Reid Richmond	Los Angeles	LD 45+58	206 Encina-*692*
[1]Bright, Harry Louis A.B., Stanford, 1929	San Francisco	Soc.S. 180+112	Al. Tau Om.-*1384*
[5]Brill, Irwin Ettlinger A.B., Stanford, 1928	Los Angeles	Law gr.	741 Addison, P-*1078*
Brink, Charles M., Jr.	Palo Alto	LD 93+57	Chi Psi-*1648*
Brink, Holden Edmund A.B., Stanford, 1929	Palo Alto	Pre-Clin. 189+135	Chi Psi-*1648*
[34]Brintle, Shirley Lanny B.S., Southwestern State Teachers College, 1922; A.M., Stanford, 1929	Norman, Okla.	Educ. gr.	836 Kipling, P-p
Bristow, John Robert	Palo Alto	Econ. 140+18	558 Lincoln, P-p
[4]Brittell, Clarence A. A.B., San Jose State Teachers College, 1929	Hollister	Educ. gr.	240 S. 12th, SJ-sj
[4]Britton, Lewis Henry A.B., Stanford, 1905	Morgan Hill	Educ. gr.	Sunnyvale-Box 931, s
[4]Broadbent, Vernon Edgar A.B., State College of Washington, 1925	Santa Clara	Educ. gr.	1330 Idaho, SC-sc
Brobeck, William Morrison	Piedmont	S.Engr. 140+162	225 Toyon
Brock, Alden Lorin	San Diego	Econ. 92·39+34	Delta Chi-*1304*
Brock, Joseph S. A.B., College of St. Thomas, 1926	Sheldon, Iowa	Law gr.	3 Union-*1174*
[4]Brodie, Rose A.B., Arizona, 1925	Superior, Ariz.	Span. gr.	632 Gilman, P-p

[5]Brodrick, Richard Boyd	Piedmont	LD 28+10	223 Encina-*1167*
[2]Bronson, Frank S.	Hollywood	LD 20–1	304 Encina-*1270*
[4]Brooke, Virginia Elizabeth	Bakersfield	LD ‡	179 Roble-*1171*
Brooker, Edgar	Kodiak, Alaska	Min. gr.	365 Guinda, P-p
A.B., Stanford, 1927, Engineer, 1929			
[1]Brooks, Baylor	Los Angeles	Geol. gr.	427 Webster, P-*1468*
A.B., Stanford, 1928			
[12]Brooks, James	Los Angeles	LD 20–23	245 Encina-*1035*
Brooks, Phillips Gardner	Honolulu, T.H.	S.Bus. gr.	Phi Delta Theta
A.B., Stanford, 1927			
[1]Brooks, Robert Wormald	Erie, Pa.	Soc.S.110·70+15	PhiKap.Psi-*1333*
A.B., Stanford, 1929			
[4]Brorsen, Frederick J.	Sacramento	Educ. gr.	733 Homer, P
A.B., Colorado State Teachers College, 1923			
[34]Brouse, Weldon Shields	Monrovia	Econ. 90·14–2	Phi Delta Theta
[1]Brown, Bert Elmer	Livermore	Ec.-Acct.23·157+86	231 Brn.-*2665*
A.B., Stanford, 1929			
Brown, Carl Grover	San Francisco	LD 42+15	332 Encina-*1404*
[2]Brown, Clara M.	St. Paul, Minn.	Educ. gr.	614 Alvarado
A.B., Minnesota, 1913			
[4]Brown, Crawford Allen	Montevallo, Ala.	Chem. gr.	627 Homer, P-p
A.B., Lincoln, 1925			
Brown, David Edward	Indianapolis, Ind.	LD 46+26	335 Encina-*2053*
[25]Brown, Donald Merritt	Taft	S.Engr. 138+33	212 Toyon-*605*
Brown, Dorothy Baily	San Francisco	Econ. 185+180	Kappa Kappa Gam.
A.B., Stanford, 1929			
Brown, Dorothy Margaret	Palo Alto	Chem. 64·89+141	Base Hosp., P-p
Brown, Earl Theodore	Salem, Ore.	Phys. gr.	136 Partridge, MP-mp
B.S., Washington, 1918, M.S., 1924			
[4]Brown, Florence Greenlaw	Eureka	Educ.133·34+34	15 CowperCt.,P-p
[1,34]Brown, George Nolan	Cheney, Wash.	Econ.135·33+23	576Alvarado-*1383*
[1]Brown, Harmon Clifford	Riverside	Law gr.	531 Encina-*1102*
A.B., Stanford, 1927, J.D., 1929			
[1]Brown, Hugh Harrison	Palo Alto	S.Bus. gr.	440 Coleridge, P-p
A.B., Stanford, 1928			
[4]Brown, Jay Howell	Austin, Texas	Law gr.	538 Lasuen-*2398*
[1]Brown, Kenneth Ansel	Eureka	Pol.S. 39·143+11	Kappa Alpha
A.B., Stanford, 1929			
Brown, Kenneth Morrison	Santa Clara	S.Engr.90·46+81	811 M'roe, SC-sc
Brown, Lee Gorin	Sacramento	Soc.S. 90·46+37	234 Union-*1213*
[6]Brown, Leland Hermon	Palo Alto	E.E. gr.	525 Guinda, P-p
A.B., Stanford, 1922, Engineer, 1924			
Brown, Lucy	Palo Alto	LD 55–9	444 Tennyson, P-p
Brown, Marcella Margaret	Gilroy	LD 100+65	318 Roble
[4]Brown, Marguerite	Greenfield, Ind.	Zoöl. ‡ 15+9	607 Gerona
[5]Brown, Marshall Roberts	Palo Alto	LD 97–3	440 Coleridge, P-p
[1]Brown, Merrill Williams	Providence,R.I.	S.Biol. gr.	543 Byron, P-*956*
A.B., Redlands, 1927; A.M., Stanford, 1929			
[5]Brown, Morden Grant	Palo Alto	Phys.S. gr.	1013 Ramona, P-*658*
A.B., Stanford, 1929			
[4]Brown, Oliver Ellis	Newman	Educ. gr.	333 Kipling, P-p
B.S., Oregon State Agricultural, 1922			
Brown, Robert Minge	San Francisco	LD 99+161	138 Toyon-*2668*
Brown, Verne Wilton	Livermore	LD 42+31	202 Encina-*2665*
Brown, Walston Shepard	Coronado	Pol.S. 136+174	235 Toyon-*969*
Brown, W. Barret	Los Angeles	LD 89–4	135 Branner-*2781*
Brown, Worth Alonzo	Capitola	LD 90+19	Theta Xi

Browne, E. Wayles, Jr. Shreveport, La. Econ. gr. 543 Encina-*727*
A.B., Stanford, 1929
[4]Browne, Kenneth Alton Hastings, Neb. Educ. gr. 1024 Emerson, P-p
A.B., Hastings, 1928
Brownell, Robert Coffin Los Angeles Econ. 99+31 Chi Psi-*1648*
[4]Browning, George Lewis Florin Zoöl. ‡ Pacific Grove-pg
Brownridge, William Thos. Los Angeles LD 70+4 Theta Delta Chi-*1828*
Brownstone, Louis Horace San Francisco Law gr. 759 Middlefield, P-p
A.B., Stanford, 1927, J.D., 1929
[4]Brubaker, Florence Lucille Orange Bot. gr. Pacific Grove-pg
A.B., California, 1924, A.M., 1925
Brumbaugh, Donald Harmon Redlands Med. gr. 2317 Sacramento, SF-sf
A.B., Redlands, 1926
[5]Brumbaugh, Homer Clark Hartville, O. Chem. gr. 634 College, M-*2119*
B.S., McPherson, 1928
Bruml, Leonard Foote Palo Alto Med. gr. 2422 Clay, SF-sf
A.B., Stanford, 1926
[12]Brundage, John Crouch San Jose Econ. 90·42+4 427 Encina-*948*
[1]Brunner, William Harold Palo Alto Law gr. 1520 Byron, P-p
A.B., Stanford, 1927, J.D., 1929
[5]Brunnier, Henry John, Jr. San Francisco Econ. 165+105 Kappa Alpha
[4]Bruntz, George G. Hastings, Neb. Hist. gr. 1024 Emerson, P-p
A.B., Hastings, 1925; A.M., Stanford, 1928
[3]Bryan, John Chase Placentia LD 46–5 Kappa Sigma-*1326*
Bryan, Roger Bates Seay San Diego S.Bus.gr. 1715High,Oakland-*1041*
B.S., California Institute of Technology, 1926
[4]Bryant,Stewart Frederick St. Paul,Minn. Pol.S. gr. 755 Santa Ynez
Graduate, U.S. Naval Academy, 1913
[5]Bryant, W. Byron San Diego Law gr. 1736 Middlefield, P-p
A.B., Stanford, 1928
[5]Buchanan, A. Russell Palo Alto Hist. gr. Palo Alto-Box 431, p
A.B., Stanford, 1927, A.M., 1928
[4]Buchser, Emil R. San Jose Educ. ‡ 804 Minnesota, SJ-sj
[2,4]Buchser, Herman Robert San Jose Educ. gr. 804 Minnesota, SJ-sj
A.B., San Jose State Teachers College, 1928
Buckingham, Freda Marian Pasadena Fr. 90·41+29 164 Roble-*2633*
[12]Buckingham, Walter E. Stanford Univ. S.Engr. 90·26–12 104 Sequoia-*585*
[2,4]Buckwalter, William Wright Palo Alto Econ. 158+87 1511 Waverley, P-p
Budd, Paul Lincoln Honolulu, T.H. LD 46+20 307 Encina-*657*
[23]Bugg, Herman LeRoy Lemore LD 47·17–13 200 Encina-*1863*
Bugge, Jacqueline Menlo Park LD 47+39 Menlo Park
Bullard, Frederick Gray Piedmont S.Bus. gr. Phi Gamma Delta
A.B., Stanford, 1928
Bullard, Helen Rose Sacramento Engl. gr. Gamma Phi Beta-*1337*
A.B., Stanford, 1929
Bullard, Margaret M. King City LD 93+33 364 Roble-*2234*
Bullis, John Albert Los Angeles Med. gr. 2474 Washington, SF-sf
A.B., Stanford, 1928
[5]Bullis, William Adlai Los Angeles Law gr. Beta Theta Pi-*1335*
A.B., Stanford, 1925
[4]Bunting, John Antrim San Jose LD ‡ 498 S. 13th, SJ-sj
Burbank, William Winston Long Beach Med. gr. 2422 Clay, SF-sf
A.B., Stanford, 1927
[4]Burck, Gail Johnson Pasadena Law gr. Alpha Delta Phi-*J*
A.B., Stanford, 1927
[4]Burdsal, Dorothy P. Phoenix, Ariz. Educ. gr. 211 Roble-*1795*
A.B., Arizona, 1925

Burger, Frances Bellamy — San Diego — Engl. gr. — Kingscote-*1885*
A.B., Stanford, 1928

[4]Burgess, James Matthew — Heppner, Ore. — Educ. gr. — 588 Lasuen-*2398*
A.B., Oregon, 1919; A.M., Stanford, 1925

Burgess, John Rockett — Palo Alto — LD 90+75 — 525 University, P-*1294*

Burk, Georgina Meyer — Stanford Univ. — Pol.S.99·81+112 — 736Coronado-*825*
A.B., Stanford, 1929

Burk, Lucile — Madera — Span. gr. — 109 Roble-*2113*
A.B., Stanford, 1928

[12]Burkart, Harry William — LaSalle, Ill. — Econ. 134·16+25 — Stanford U.-*591*

[5]Burke, Marion Rebecca — Palo Alto — Soc.S.-Jn.114+49 — 1551Em'son,P-p

Burke, William H. — Los Angeles — S.Engr. 114+1 — Phi Kappa Sigma

Burks, Paul — Los Angeles — LD 44+11 — 222 Encina-*551*

Burlew, Fred Northrop — Santa Ana — LD 100+47 — Alpha Sigma Phi-*1357*

Burnaby, Homer Harding — S. Pasadena — LD 49–6 — Phi Kappa Psi

Burnett, Anne — San Mateo — LD 47+32 — 229 Roble-*2321*

[2,4]Burnett, A. Dana — East Orange, N.J. — LD 30+17 — 41 Encina-*2501*

Burnham, De Witt Kinne — San Francisco — Med. gr. — 3625 Jackson, SF-sf
A.B., California, 1926

[5]Burnhill, Henry Clifford — Long Beach — Law gr. — 450 El Escarpado-*1487*
A.B., Stanford, 1929

[4]Burnhill, Nora — Long Beach — Educ. ‡ — Perry, P-*1487*

[4]Burns, Edward Allen — Phoenix, Ariz. — LD ‡ — 142 Toyon-*564*

[4]Burns, Jack LeRoy — Roseville — Educ. gr. — 506 Mayfield
A.B., San Jose State Teachers College, 1928

[4]Burns, Lillian — Pullman, Wash. — Educ. gr. — 147 Roble
B.S., Oregon State Agricultural, 1915, 1928

Burns, Milton Dearlove — Santa Cruz — LD 90+13 — Phi Delta Theta

Burns, Robert Benton — Hollywood — LD 91+75 — Beta Theta Pi-*1335*

Burns, Robert Edward — San Francisco — Phil. 181+225 — Delta Upsilon
A.B., Stanford, 1929

[5]Burrell, Clarence — Santa Clara — Educ. gr. — 1375 Market, SC-sc
A.B., San Jose State Teachers College, 1926

[1,4]Burroughs, Harriet Prescott — Healdsburg — LD 73+92 — 377 Roble-*1249*

[5]Bursch, Charles Wesley — Mayfield — Educ. gr. — 889 Stanford, M-*1209*
B.S., Kansas State Teachers College, 1918; A.M., Stanford, 1926

[4]Burt, Anna Howell — Sacramento — Engl. gr. — 1641 California, M
A.B., Butler, 1908; A.B., Chicago, 1908

[5]Burt, William Sylvester — Skiatook, Okla. — Zoöl. 87·46+6 — 436 Encina-*1046*

[1]Burton, Grant Arthur — Walnut Creek — Econ. 181+125 — Sigma Nu-*1385*
A.B., Stanford, 1929

Busby, John, Jr. — Spokane, Wash. — Econ. 189+99 — 240 Toyon-*2665*
A.B., Stanford, 1929

Busch, James Elmer — Ukiah — Law gr. — 113 Encina-*1186*
A.B., Stanford, 1928

[12]Bush, Clarence Edward — Santa Clara — LD 92+12 — Phi Delta Theta

Butler, Ray Hatch — Payson, Utah — S.Bus. gr. — 335 Kipling, P-p
B.S., Utah, 1923

[14]Butler, Raymond Ignatius — San Francisco — Cl.Lit. gr. — 556 S. 2d, SJ-sj
A.B., Gonzaga, 1915, A.M., 1916

Butler, Wallace Pierce — Los Angeles — LD 48+37 — 305 Encina-*1811*

Butter, Franklin Alfred, Jr. — San Jose — Math.90·65+84 — 175WSnCrls,SJ-sj

[12]Butterbaugh, Don Kay — Long Beach — Econ.144+29 — PhiSigmaKappa-*538*

Butts, John Humphrey — Wichita, Kans. — LD 44·47+21 — 218 Encina-*1785*

Buxton, Louise — Long Beach — Hist. 52·149+172 — Pi Beta Phi-*1918*
A.B., Stanford, 1929

Caddel, Ernest Wiley, Jr. — Corcoran — LD 39–17 — 203 Encina-*2603*

Caddy, Frank E. Midwest, Wyo. LD 83+2 189 Cowper, P-*2174*
[3]Caglieri, Guido George San Francisco Econ. 98–10 Phi Kappa Psi
Calder, James Hamilton Vernal, Utah S.Bus. gr. 758 Waverley, P-p
B.S., Brigham Young, 1925
Caldwell, Philip Graham Piedmont S.Engr. 15·166+218 329 Union
A.B., Stanford, 1929
Calkins, Robert D. Williamsburg, Va. Econ. gr. 11 Union-*2015*
B.S., William and Mary, 1925; A.M., Stanford, 1929
[5]Call, Harrison William Eureka Law gr. 132 Laurel, P-*81*
A.B., Stanford, 1928
[4]Callaghan, Cecily Menlo Park Engl.gr. Col.SacredHeart,MP-mp
Ph.B., Loyola, 1921, A.M., 1924
[12]Cameron, Allan Oakland LD 53+1 Toyon
Camp, George Lee Palo Alto Hist.135·49+39 318Hawthorne,P-p
A.B., Stanford, 1929
Campbell, Harold Whiting Standish S.Engr.90·41–3 15Fulton,RC-*2361*
Campbell, John Marshall Laredo, Texas Geol. 194+305 134 Toyon-*1227*
A.B., Stanford, 1929
[1]Campbell, Joseph C. Long Beach LD 83–8 Delta Kappa Epsilon
[4]Campbell, Mary Elizabeth Glendale Econ. ‡ 339 Roble
[5]Campbell, Nancy Belle Des Moines, Ia. Engl. gr. Pi Beta Phi-*1918*
A.B., Stanford, 1929
[5]Campbell, Orvin W. Lodi Soc.S.-Jn. 23·141+73 PA-*1402*
[4]Campbell, Thomas Allen Los Angeles Pol.S. gr. Beta Theta Pi
A.B., Stanford, 1925
Campbell, William Alden Sacramento LD 44+25 128 Encina-*1672*
[5]Campiglia, Ralph Jetter San Francisco LD 81+56 Phi Kappa Psi
[12]Cannon, Douglass Vernon Chicago, Ill. LD 29+12 41 Encina-*691*
Cantin, Alexander Mackenzie Mt. View LD 42+7 Mountain View-*1601*
[4]Cappleman, John William Fresno Educ. gr. 176 Bryant, P-p
A.B., Fresno State Teachers College, 1926
Capwell, C. Wayland Chula Vista S.Engr.90·47–3 356Kipling,P-*1594*
Card, Ben Franklin S. Santa Monica Pol.S. 135+16 Kappa Alpha
[4]Card, John Stark Santa Monica LD 115 Toyon
Cardiff, George Howard Santa Cruz S.Engr.90·47+4 147 Emerson, P-p
Cardiff, Robert Lionel Santa Cruz S.Engr.90·27–24 147Emerson,P-p
[4]Carey, Helen Marie Mt. View Ed.-G.A. ‡ MV-Rt. 1, Bx 226, mv
Carley, Leon Alanson Hollywood Engl.-P.Sp.180+84 220Toy'n-*2665*
A.B., Stanford, 1929
Carlsmith, Merrill Lawrence Hilo, T.H. Law gr. 421 Encina-*607*
A.B., Stanford, 1928
[21]Carlson, Donald Edward Mare Island C.E. 112·72–14 538 Encina-*515*
Carlson, Edward Franklin Yreka Bact. 24·156+34 103 Sequoia-*2665*
A.B., Stanford, 1929
[4]Carlson, Irene Elvida Portland, Ore. LD ‡ Roble
[5]Carlson, John Lidstedt San Mateo Math. gr. 610 Dorchester, SM-sm
B.S., Nevada, 1928
Carlson, Raymond Charles Miami, Ariz. Span. 87·96+131 333 Union-*2162*
A.B., Stanford, 1929
Carlson, Robert Portland, Ore. LD 12·88–5 319 Sequoia
Carmichael, Annie Lou Santa Rosa Psych. 90·47+40 214 Roble-*1462*
[4]Carnahan, Chalon Wesley Palo Alto Phys. gr. 211 Seale, P-p
A.B., Stanford, 1926
Carpenter, Helen Elizabeth Richmond S.Bus. gr. 300 Roble-*2365*
A.B., Stanford, 1928
Carpenter, Howard L. Santa Paula Med.gr. 1501 Leavenworth, SF-sf
A.B., Stanford, 1928

[4]Carpenter, Lewis Eddy Earlimart Educ. gr. 538 Lasuen-*2398*
A.B., Fresno State Teachers College, 1926
[34]Carpenter, Powell W. Chicago, Ill. Pol.S. 141–25 Stanford Univ.
Carr, Donald Brooks Stockton Econ.21·120–8 551 Tennyson, P-p
Carr, Gilbert Lawrence Santa Monica LD 87+118 141 Toyon-*1737*
[14]Carr, William George Palo Alto Educ. gr. 666 Homer, P-p
A.B., Stanford, 1924, A.M., 1926
Carr, William Herbert Palo Alto S.Bus. gr. 424 Seneca, P-*1981*
A.B., Stanford, 1928
Carrington, Jack Abeel Santa Rosa Econ. 90·62+68 216 Sequoia-*563*
[4]Carroll, Cecil James Lovelock, Nev. Educ. gr. 656 Bryant, P-p
A.B., Western State College of Colorado, 1924
[5]Carroll, Frank Bernard San Jose Law gr. 530 Encina-*508*
A.B., Stanford, 1928
[1-]Carroll, Frank Emmet, Jr. SanFrancisco Soc.S. 40·55+41 367 16th Ave., SF
[4]Carruthers, Fanny Gaddis San Jose Educ. gr. 1095 Chapman, SJ-sj
A.B., California, 1914, A.M., 1917
[4]Carter, Alfred Bernard Portland, Ore. Educ. gr. Barron, M
B.S., Oregon State Agricultural, 1926
Carter, Benjamin Chadwick San Jose Econ. 182+89 103 Branner-*653*
A.B., Stanford, 1929
[4]Carter, Clinton C. Fresno Educ. gr. 436 Stanf'd,M-Bx485,m
B.S., Central Missouri State Teachers College, 1925
Carter, Conwell Brooks Phoenix, Ariz. LD 45·41+11 337 Encina-*1942*
Carter, Frederick Butler, III Pasadena LD 70·9 Zeta Psi-*B*
Carter, Irval Wayne Porterville Math. 90·52+81 646 Alvarado
Carter, Marshall Lloyd Los Angeles Pre-Med.160+56 Alpha Del.Phi-*J*
Carter, Nelson Ira Los Angeles Soc.S.9·116+64 Alpha Delta Phi-*J*
Carter, Oliver Jesse Redding LD 43+6 225 Encina-*1104*
Cartlidge, Catherine Louise Redlands LD 46+25 159B Roble-*2542*
Cartwright, Theodore Carl, Jr. Pasadena LD 47+29 206 Encina-*1406*
[4]Carver, Sanford E. Bellingham, Wash. Educ. 112·55+22 176 Cowper, P-p
Cary, William Sayre San Francisco Med. gr. 2300 Webster, SF-sf
A.B., Stanford, 1922
Case, Donald Lathrop Los Gatos Econ. 111+79 Sigma Al. Eps.-*1305*
Case, Evelyn Hart San Francisco Med. gr. 1849 Page, SF-sf
A.B., College of the Pacific, 1922
[5]Case, Robert Cutler Palo Alto LD 46·42–10 424 Seneca, P-p
[4]Case, Roscoe David Brush, Colo. Educ. gr. Kingscote-*581*
A.B., Denver, 1922, A.M., 1923
[4]Casey, Helen San Francisco Engl. gr. 2700 Jackson, SF-sf
A.B., Nebraska, 1927
[4]Casey, John Harold Knoxville, Ia. Soc.S.-Jn. gr. 652 Channing, P-p
B.Jn., Missouri, 1921
[4]Casiday, Harold Larue Pomona Educ. gr. 652 Channing, P-p
A.B., Pomona, 1927
[2]Cass, Alonzo B. Palo Alto Pre-Med.160+36 1001Ramona,P-p
[4]Cass, George Theodore San Jose Educ. gr. 977 S. 8th, SJ-sj
B.S., Pittsburgh State Teachers College, 1918
Cassel, John David Mayfield Bot. 90·50+64 470 Sherman, M-m
*Casselberry, William S. Long Beach Educ. gr. Waterman-Box 81, w
A.B., California, 1916; A.M., Stanford, 1929
[12]Castellanos, Joseph C. Los Angeles Econ. 150+107 417 Encina-*1612*
Catanich, Joseph George San Francisco Law gr. 543 Encina-*861*
A.B., Stanford, 1928
Cathcart, Arthur James Palo Alto LD 83+3 1215 Emerson, P-p
[12]Cathcart, Robert Samuel Palo Alto Soc.S. 119+61 1215 Emerson, P-p

Cathcart, Wallace Daniel A.B., Stanford, 1927	Palo Alto	Law gr.	1215 Emerson, P-p
Catlin, Harry Stockwell	Los Angeles	LD 41+5	27 Encina-*1965*
[12]Cavalero, Philip A.B., Stanford, 1928	Stockton	Law gr.	319 Encina-*2027*
§[1]Cavell, Joseph Platt	Carson City, Nev.	LD 93+20	257 Toyon-*2023*
Cavitt, Marion Clark	Shelby, Mont.	LD 87+30	832 Kipling, P-p
[12]Cecil, Robert Edgar A.B., Stanford, 1928	Palo Alto	S.Bus. gr.	440 Melville, P-p
[5]Center, Hugh Stuart A.B., Stanford, 1927	San Jose	Law gr.	245 S. 13th, SJ-*1363*
[4]Center, Mary Stuart A.B., San Jose State Teachers College, 1925	San Jose	Hist. gr.	245 S. 13th, SJ-sj
[4]Cerf, Adrienne B.L., California, 1900	San Francisco	Fr. gr.	170 Roble-*1024*
Chadwick, Edward Spencer	Los Angeles	LD 42+17	137 Encina-*1611*
Chadwick, George C., Jr.	Palo Alto	LD 32–11	536 Lincoln, P-p
[13]Chai, Ch'u	Washington, D.C.	Educ. 90-90–2	959 Wav'ley, P-*2652*
[4]Challender, Harry Morgan A.B., Wyoming, 1926	Hanna, Wyo.	Educ. gr.	910 Ramona, P-p
[1]Chalmers, Harry Hollis A.B., Stanford, 1929	Pocatello, Idaho	Law 14-236+5	Kappa Alpha
[4]Chamberlain, Percy Ira B.S., Washington, 1920	Reedley	Chem. gr.	Pepper Drive, P-p
Chamberlain, Ross H.	Virginia, Minn.	Econ. 93-59+51	MP-RFD 9, mp
Chamberlin, Joseph Conrad A.B., Stanford, 1923, A.M., 1924, Ph.D., 1929	Palo Alto	Zoöl. gr.	8 Homer Ct., P-*2452*
[1]Chambers, Jack Valentine	Oroville	Pre-Clin.135-15+2	721 Wvly., P-p
Chan, Shau Hong A.B., Lingnan, 1928	Canton, China	Pol.S. gr.	21 Brenham, SF-sf
[4]Chandler, Constance Marion	Hollywood	Phil. ‡	336 Roble-*654*
Chandler, Dorothy Maud	Berkeley	LD 91+89	282 Roble-*925*
[5]Chang, Francis Y.	Kwei-Chow, China	Educ. 90-47-37	Chinese Club-*735*
[4]Chang, Fred C. A.B., Columbia, 1927	San Francisco	Chem. gr.	228 Toyon-*534*
[5]Chang, Hui Wen	Tsingtao, China	Pol.S. 90-54+29	Chinese Club-*2547*
[4]Chapin, Leland Taylor A.B., Willamette, 1925	Reedsport, Ore.	Law gr.	305 Union
[5]Chapman, Evelyn Bessie	San Jose	Pre-Med.90-48+38	208 Roble-*2524*
Chapman, Newton B.	Chardon, Ohio	Soc.S. 135+126	Sigma Nu-*1385*
[4]Chapman, Thomas White A.B., Illinois, 1917	Los Gatos	Educ. gr.	Los Gatos-lg
[4]Chappell, Thelma Bernice	Sacramento	Psych. ‡	239 Roble-*1337*
[12]Charles, Raymond W., Jr. A.B., Stanford, 1929	San Francisco	Econ. 181+63	Al.Tau Omega-*1384*
Chase, Elsie Leslie	San Diego	Hist. 45-118+51	Pi Beta Phi-*1918*
[4]Chase, Margaret Alma A.B., California, 1926, A.M., 1927	Berkeley	Hist. gr.	583 Lagunita
Chatham, Russel Wilson A.B., Stanford, 1929	San Francisco	Econ. 181+26	103 Branner-*2364*
Chatham, William	San Francisco	LD 102+38	214 Toyon-*2364*
[1]Cheng, Ying Yuan A.B., Stanford, 1927, A.M., 1928	Anhwei, China	Econ. gr.	835 Waverley, P-*24*
[4]Chenoweth, Clyde Garfield A.B., California, 1922, A.M., 1923	Pt. Richmond	Econ. gr.	431 Wellesley, M-*591*
Cheo, Yuan-Chen A.B., San Jose State Teachers College, 1928	Kiu-Kiang, China	Soc.S. gr.	Chinese Club-*1157*

§Deceased, November 17, 1928.

Cherry, Donald Langer A.B., Stanford, 1928, A.M., 1929	Watsonville	Hist. gr.	559 Encina-*1561*
Cherry, John Gandalpho	New York, N.Y.	LD 34+20	*27* Encina-*1812*
[13]Chia, Yu Hui A.B., Stanford, 1928, A.M., 1929	China	Pol.S. gr.	635 Bryant, P-p
[5]Chichester, James B. A.B., Stanford, 1929	Santa Barbara	Phil. gr.	112 Toyon-*2233*
Chichizola, Tom Lewis	Jackson	Soc. S.130+29	Sig.AlphaEps.-*1305*
Chilcott, Dorothy A.B., Stanford, 1929	Menlo Park	Educ. gr.	Chi Omega
Chillson, Charles White	Woodside	LD 77+16	Woodside-Box 199, rc
[2]Chittenden, Carleton Lyman	San Mateo	LD 6–9 37	CrystlSpgs.Rd.,SM-sm
[5]Chloupek, Lily Laura	San Francisco	Bact. 143+188	Delta Del.Del.-*1325*
Chope, Harold D. A.B., Stanford, 1926	San Francisco	Med. gr. 2180	Washington, SF-sf
Chou, Siegen K. A.B., Stanford, 1926, A.M., 1928	Anhwei, China	Psych. gr.	Chinese Club-*1119*
Chrisman, Herman Henry A.B., Stanford, 1922, A.M., 1923	San Jose	Hist. gr.	695 E. St. James, SJ-sj
Chrisman, Norman Ellsworth A.B., Stanford, 1929	San Jose	Hist. 69·111+58	Phi Sigma Kappa
Christensen, Allen D. A.B., Stanford, 1927, Engineer, 1929	Salt Lake City, U.	C.E. gr.	*222* Sequoia-*1556*
[1]Christensen, Joseph Raymond	Compton	LD 49·15+25	137 Encina-*2661*
Christensen, Kenneth Chester	Palo Alto	Econ. 125+70	552 Hamilton, P-p
[4]Christensen, Walter C. A.B., Fresno State Teachers College, 1929	Selma	Educ. gr.	557 Lasuen
[4]von Christierson, Anne A.B., San Jose State Teachers College, 1926	San Jose	Educ. gr.	269 Roble
Chubbuck, Charles Dixon A.B., Stanford, 1929	Los Angeles	Geol. 5·180+51	138 Branner-*618*
Church, Carol Porter A.B., Stanford, 1929	El Paso, Texas	Engl.135·53+36	Mayfield-Bx194,m
[12]Church, John A.	New Plymouth, Idaho	LD 67·9–5	527 Homer, P-*1974*
Churchill, Ambrose Sevier	Beverly Hills	LD 97+65	Theta Chi-*1383*
Churchill, Edwin Perry	Santa Paula	Econ. 9·125+168	AlphaDeltaPhi-*J*
Cilley, Herbert Arthur A.B., Stanford, 1926	Long Beach	Med. gr.	1925 Pierce, SF-sf
[234]de Civray,BenjaminAlexander A.B., Oregon, 1927	PaloAlto	Educ. gr.	224 Everett, P-p
[5]Clagstone, Kirk	San Mateo	Econ. 164+47	Alpha Sig. Phi-*1357*
Claire, Guy Shirk A.B., Southern California, 1920; A.M., Pennsylvania, 1928	San Francisco	Pol.S. gr.	610 Hyde, SF-sf
[5]Clapp, Arthur Davis	Berkeley	Econ. 48·45+5	402 Encina-*1853*
Clapp, Austin Rhone	Hollywood	LD 45+44	400 Encina-*1936*
Clark, Charles Kittredge A.B., Stanford, 1928, Engineer, 1929	Berkeley	Chem. gr.	*326* Union-*2136*
Clark, Donald Eugene	Ashland, Ohio	Econ. 89·46+5	Phi Delta Theta
[4]Clark, Duncan Ellsworth A.B., Drake, 1913, A.M., 1915	Templeton	Educ. gr. 1247	Stanford, M-*1917*
Clark, Elizabeth Allerton A.B., Stanford, 1928, A.M., 1929	Berkeley	Hist. gr.	382 Roble-*1632*
Clark, Fred Adam, Jr. A.B., Redlands, 1928	Redlands	Med. gr.	475 Forest, P-p
[2]Clark, G. Houghton A.B., Stanford, 1927, A.M., 1929	Palo Alto	Zoöl. gr.	Theta Xi
[12]Clark, Helen Lucretia	Oakland	Soc.S.-Jn. 42·85–6	Kap.Al.Theta

Clark, John Alfred	Stanford Univ.	C.E. 142+48	201 Branner-*2052*
[12]Clark, John William A.B., Stanford, 1929	Pasadena	Econ. 186+153	Phi Delta Theta
[5]Clark, Lewis Wilber	Palo Alto	Pol.S. 90·73+27	715 Bryant, P-p
Clark, Lincoln A.B., Stanford, 1929	Pasadena	Chem. 32·160+110	Phi Kappa Sig.
[4]Clark, Mildred	Palo Alto	LD ‡	715 Bryant, P-p
Clark, Ned	Ojai	S.Engr. 90·44+35	660Wav'ley,P-p
[1]Clark, Ray Eldon	Berkeley	S.Engr.128+2	360 Kingsley, P-*803*
Clark, Ruth Marie	Palo Alto	LD 46+39	250 Roble-*2737*
Clark, Wayne James A.B., Pomona, 1928	Los Angeles	S.Bus. gr.	855 Waverley, P-p
Clark, Wellman Albert A.B., Stanford, 1929	Kellogg, Idaho	Mil.S. 180+15	247 Branner-*605*
Clark, William Nunan	San Francisco	Hist. 121+13	Phi Delta Theta
Clarke, Elizabeth Mar	San Francisco	LD 88+16	Delta Gamma-*1366*
[4]Clarke, Oliver French	Myrtle Point, Ore.	Educ. 1·115+17	136 Harriet, P-p
Clarke, Robert E.	Oakland	Econ. 136+81	Sigma Nu-*1385*
Clarke, Robert Montgomery	Los Angeles	Hist. 135+53	Zeta Psi-*B*
Clarke, Rosamond	Los Angeles	Hist. 135+89	Kappa Kappa Gam.
Clarke, Stephen Kenneth	Santa Barbara	Econ. 136+106	Sigma Nu-*1385*
Clausen, Radcliffe Charles	Eagle Rock	LD 75+103	206 Branner-*2723*
[4]Cleese, Esther Evelyn A.B., California, 1923	Oakland	Engl. gr.	320 Roble
[1]Cleese, G. Francis	Palo Alto	S.Engr. 90·21–6	338 Central, P-p
Clemens, Cyril C. A.B., Washington University, 1928	Webster Groves, Mo.	Engl. gr.	1180 College, M-m
[4]Clement, Warren Perry A.B., Baylor, 1919, A.M., 1920	Lubbock, Tex.	Educ. gr.	515 University, P-p
[4]Clemmons, June Neville A.B., State College of Washington, 1920	Tacoma, Wash.	Engl.-P.Sp.gr.	SigmaKappa-*1327*
Cline, Claude Walter	Prescott, Ariz.	Econ. 87+57	Theta Xi
[5]Clough, Frank, Jr.	Kansas City, Mo.	LD 41+5	328 Encina-*664*
[1]Clough, William McN.	Kansas City, Mo.	LD 55–13	Delta Chi-*1304*
Clouse, Floyd Willis	Lodi	Chem. 138+140	215 Toyon
[4]Cluxton, Donald Edwin A.B., Stanford, 1928	Arcata	Pol.S. gr.	Monterey Presidio-m
Clyne, Beatrice Virginia	Redwood City	LD 39+9	254 Roble-*1235*
[4]Coates, Annie Ellis A.B., Stanford, 1906	Morgan Hill	Educ. gr.	147 Emerson, P-p
[1]Coates, Stanley Kenneth	Los Angeles	LD 79–15	Los Altos-Box 240, la
Coats, Edwin Frederick	Oakland	LD 69+11	Alpha Sigma Phi-*1357*
Coats, Philip Leiter	Oakland	Econ.9·147+32	AlphaSig.Phi-*1357*
Cobb, Charles Elvan	Fresno	Econ.-Ac.34·116+18	134 Bnr.-*2587*
[3]Cobb, Eldred Thomas	Roseburg, Ore.	Econ. 118·16+4	1004 Emerson, P-p
Cobb, William Lucien, Jr. A.B., Willamette, 1927	Roseburg, Ore.	Econ. gr.	1004 Emerson, P-p
Coberly, William Bayley, Jr.	Hollywood	Econ. 123+67	Chi Psi-*1648*
[1]Coblentz, Richard A.B., Stanford, 1924, J.D., 1929	San Francisco	Law gr.	213 Union-*1934*
Cochran, Sam Luther A.B., Stanford, 1929	La Grande, Ore.	Econ. gr.	Sigma Nu-*1385*
[12]Coelho, Louis Joseph B.S., California, 1926	Palo Alto	Law gr.	Cardinal Ct., P-p
Coffen, Charles West	Portland, Ore.	LD 46+24	310 Encina-*2241*
[4]Coffing, Stuart Claude	Sacramento	Pol.S. ‡	538 Lasuen

[4]Coffman, Clifford Merle	Montebello	Soc.S. ‡	240 Toyon
Cohen, Milton M., Jr.	Beverly Hills	Soc.S. 180+63	202 Toyon-*605*
A.B., Stanford, 1929			
Cohn, Roy Barnett	Los Angeles	Pre-Clin.196+156	745Cwp.,P-*1199*
A.B., Stanford, 1929			
Coil, Charles, Jr.	Antioch	LD 42+28	405 Encina-*2463*
Coit, Charles Winn	Detroit, Mich.	LD 56+26	445 Encina-*1022*
Colberg, Florence Kathryn	Stockton	Hist.102+17	Delta Delta Del.-*1325*
[4]Colburn, Edna Marjorie	Turlock	Educ. ‡	354 Roble-*2172*
Colburn, Harry Lynn	Turlock	Ed.-G.A. 90·93+31	329 Union-*2172*
A.B., Stanford, 1929			
[4]Colby, Charles B.	Bakersfield	LD	124 Encina-*672*
[1]Colby, Leavenworth	San Diego	Phil. gr.	214 Union
A.B., Stanford, 1928			
Cole, Andrew Morris	Pasadena	Econ. 9·171+62	115 Toyon-*895*
A.B., Stanford, 1929			
[12]Cole, Creswell Chapin	San Francisco	Econ. 180+169	Beta Theta Pi-*1335*
A.B., Stanford, 1929			
[5]Cole, Henry Clay	Champaign, Ill.	Econ.105·56+35	Del.TauDel.-*1363*
[2½]Coleman, Anne Challen	Los Angeles	LD 73+35	Pi Beta Phi-*1918*
[12]Coleman, Harry S.	Portland, Ore.	Hist. 180+66	218 Toyon-*1246*
A.B., Stanford, 1929			
[5]Coleman, James Valentine	San Francisco	LD 59–2	Phi Kappa Psi
[4]Coleman, John Joseph, Jr.	San Francisco	Engl. gr.	334 Union-*631*
A.B., St. Ignatius, 1929			
Coleman, Raymond Joe	Long Beach	Law gr.	Delta Kappa Epsilon
A.B., Stanford, 1928			
Coles, Edwin W.	Covina	LD 49+19	246 Encina-*1972*
[4]Collett, Edward	Dinuba	Ed.-G.A. gr.	Palo Alto-p
A.B., Denver, 1928			
Collie, William J.	Oregon City, Ore.	LD 44+35	406 Encina-*2192*
[1]Collier, Charles Wood	Mill Valley	LD 20·81+59	214 Sequoia-*503*
[4]Collier, Raywil	Fort Worth, Texas	Span. gr.	171 Emerson, P-p
A.B., Baylor, 1921			
[1]Collins, Calvin G.	Auburn	Econ. 6·126–19	Sigma Nu-*1385*
[12]Collins, David Everett	Los Angeles	LD 12–7	327 Encina-*2693*
[5]Collins, William Henry	Los Angeles	Econ. 173+31	Phi Kappa Sigma
[4]Collis, Alma A.	San Jose	Educ. ‡	965 Schiele, SJ-sj
Collis, William Henry L.	San Jose	Med. gr.	2693 22d St., SF-sf
A.B., College of the Pacific, 1926			
[1]Colloff, Harry	St.Joseph, Mo.	Econ.178+36	Stanford Univ.-*1292*
Colm, Melba Eileen	Durham	Engl. 90·96+84	164 Roble-*514*
A.B., Stanford, 1929			
Colt, Henry	La Jolla	LD 38–19	227 Encina-*1667*
Colvin, Donald Longstreet	Oakland	LD 75+8	Phi Gamma Delta
[5]Colvin, Jacinth	Binford, N.D.	LD 47+20	314 Roble-*2332*
[5]Coman, Catherine Tull	San Rafael	Fr. 15·128+145	Alpha Phi-*1387*
[4]Combatalade, Aimee Marie	San Jose	Educ. gr.	455 Coe, SJ-sj
A.B., San Jose State Teachers College, 1928			
[5]Combellack, Frederick M.	San Francisco	Cl.Lit. gr.	531 Encina
A.B., Stanford, 1928			
[5]Combs, Eldredge Ersie	Long Beach	Econ. 173+117	Phi Delta Theta
Comfort, William Jabez	Stockton	S.Engr. 130+54	211 Branner-*2427*
Comings, Mary Benita	Ramona	LD 48+33	315 Roble-*2724*
[4]Conard, Mildred Rovena	San Diego	Educ. gr.	583 Lagunita-*1918*
A.B., Stanford, 1924			

[13]Condit, Ira Judson Berkeley Bot. gr. 544 Bowdoin, M-*1581*
B.S., Ohio State, 1905
[4]Conger, Carey Montraville Fairland, Ind. Educ. gr. Grove Auto Camp, P-p
A.B., Indiana, 1920
[4]Conger, Muriel Payne Fairland, Ind. Engl. gr. Grove Auto Camp, P-p
B.M., Indiana College of Music and Fine Arts, 1928
[4]Conley, Charles Clarence Marana, Ariz. Educ. gr. 115 Alma, P
Ph.B., Chicago, 1915
Conner, Doris Elizabeth Los Angeles Soc.S.-Jn.117+85 Kap.Alpha The.
[23]4]Conner, Jay Davis San Diego Educ. gr. 851 Lytton, P-p
A.B., San Diego State Teachers College, 1928
Conrad, Frederick Allen Tuscon, Ariz. Econ. gr. 465 Ruthven, P-p
A.B., Goshen, 1912; A.M., Indiana, 1913
[23]Conradi, Carl San Francisco Econ. 5·134+53 310 Toyon-*2665*
[12]Conron, Harry Maxwell Bakersfield Law gr. 527 Cornell, M-Bx 326, m
A.B., Stanford, 1927
Conroy, Edward Harold Long Beach Pol.S.183+162 Alpha Sig.Phi-*1357*
A.B., Stanford, 1929
[5]Conroy, Mary Katherine San Francisco Span. gr. Madroño-*2522*
A.B., College of the Sacred Heart, 1928
Conroy, Thomas F., Jr. San Francisco Med. gr. *2704* Union, SF-sf
A.B., Stanford, 1927
[4]Converse, Loretta Wardlaw Palo Alto Pub.H. ‡ 808 Waverley, P-p
Cook, Albert Lyle Los Angeles E.E. gr. 107 Sequoia-*915*
A.B., Stanford, 1928, Engineer, 1929
Cook, Alexander J. San Francisco Hist. 180+104 Beta Theta Pi-*1335*
A.B., Stanford, 1929
Cook, David Erving Pasadena LD 44+13 119 Encina-*1892*
Cook, Edward Bailey Redlands Econ. 93·87+30 Phi Gamma Delta
A.B., Stanford, 1929
Cook, Joseph Rudolph San Jose LD 86+13 213 Branner-*2668*
Cook, Lyle Edwin Santa Ana Pol.S. 90·91+64 304 Sequoia-*1131*
A.B., Stanford, 1929
Cook, Ralph Williams Los Angeles LD 61–10 Kappa Sigma-*1326*
Cook, Richard Crothers Stockton Phys. 141+59 Sigma Nu-*1385*
Cook, Stanley James San Jose Law gr. 643 High, P-*2668*
A.B., Stanford, 1928
Cook, William Harrison Edmonton, Alta. Chem. gr. 333 Waverley, P-*2752*
B.S., Alberta, 1926, M.S., 1928
Cooke, Charles Montague Honolulu, T.H. Econ. 90·28–12 Phi Delta Theta
[2]Cooke, Douglas Alexander Palo Alto Bot. gr. 1753 Cowper, P-p
B.S., Yale, 1924; M.S., Hawaii, 1925
[23]Cooke, Frederick James San Francisco Econ. 98+37 Al.Kap.Lambda-*658*
Coombs, Donald S. Monrovia LD 82+22 216 Branner-*903*
Coons, John Calvin Woodland S.Engr.90·37+1 27Enc.Av.,P-*1351*
Coons, Robert W. Aberdeen, Wash. Phys.S. 30·158+76 Phi Gam. Del.
A.B., Stanford, 1929
Cooper, Charles Edward Los Altos LD 90+50 Burke, LA-*658*
[5]Cooper, Charles Edwin Seattle, Wash. Zoöl. 120·59+34 600 Foothill
Cooper, Donald Hinshaw Sebastopol LD 77·37+24 406 Sequoia-*2426*
Cooper, Elizabeth Stuart San Francisco LD 91+123 Kappa Alpha Theta
Cooper, Florence E. Great Falls, Mont. Econ. 189+132 Chi Omega
A.B., Stanford, 1929
Cooper, Grosvenor W. Stanford Univ. LD 39+67 625 Salvatierra
Cooper, John Marshall Seattle, Wash. LD 10·99+111 600 Foothill
Cooper, Tom Richardson Reno, Nev. LD 88+10 Zeta Psi-*B*
Cooper, Tom Ross Los Angeles S.Engr.142+55 AlphaSig.Phi-*1357*

Cooper, Walter Johnston Los Angeles LD 45+43 205 Encina-*94*
[1]Cope, Danella Straup Salt Lake City, U. Chem. gr. Madroño-*2208*
A.B., Utah, 1923; A.M., Stanford, 1926
[4]Cope, Harvey F. Medford, Ore. Educ. gr. 535 Hawthorne, P-p
A.B., Washington, 1920, M.S., 1925
[4]Copeland, Herbert Faulkner Sacramento Bot. gr. 367 Forest, P-p
A.B., Wisconsin, 1922; M.S., California, 1925
Copley, Frank Olin Burlingame S.Let. 134+211 Roble Ridge, M
[4]Coppock, Alice Palmer Albuquerque, N.M. Span. gr. 249 Roble
A.B., New Mexico, 1927
[4]Corbet, Arlie Beatrice Mountain View Educ. gr. Mt. View-Box 268, mv
A.B., San Jose State Teachers College, 1928
[14]Cordrey, Frank Beck San Jose LD 46–13 151 S. 1st, SJ-sj
Cordry, Vernon Hayward Engl. 142+28 213 Toyon-*2128*
Cornell, Jack Leonard Los Angeles LD 41+33 141 Encina
Cornell, James Payne Sunnyvale LD 92+47 Sunnyvale-Box 254, s
Cornell, Willis Allison Fresno S.Engr.105·36+22 543 Mdlfld.,P-p
Corum, William Thomas Napa LD 48+46 18 Encina-*1497*
Cosand, Merle Edmund El Centro Pre-Med. 90·46+36 247 Alma, P-p
[4]Costa, Eva Lorraine Newark LD ‡ 13–5 Roble
[4]Costello, Catherine M. Berkeley Span. gr. 583 Lagunita-*1918*
A.B., California, 1923
[5]Cottrell, William Fred Palo Alto Pol.S. gr. 949 Webster, P-p
A.B., Occidental, 1925; A.M., Stanford, 1929
[4]Coughlin, Joseph Leo San Francisco LD – 566 Lasuen
[5]Coulter, Robert Isham South Pasadena Law gr. 640 Tennyson, P-*2582*
B.S., California Institute of Technology, 1928
Cousins, George Raynal Eureka LD 92+72 212 Sequoia-*1281*
[2]Cowan, James W. Bakersfield LD 37–3 Theta Xi
Cox, Alvin Joseph, Jr. Palo Alto Med. gr. St. Luke's Hosp., SF-sf
A.B., Stanford, 1927
[4]Cox, Cora English San Jose Educ. gr. 345 E.SanAntonio,SJ-sj
A.B., San Jose State Teachers College, 1923
Cox, Mark Thomas Cheyenne, Wyo. LD 43+37 1205 Fulton, P-p
Cox, Mary Morris Palo Alto Soc.S.180+197 1118 Emerson, P-p
A.B., Stanford, 1929
[4]Cox, Susan San Jose Educ. gr. 345 E.SanAntonio,SJ-sj
A.B., San Jose State Teachers College, 1923
[5]Cox, Wesley Philip Dallas, Texas Min. 68·137+46 201 Branner-*1482*
[2]Cozzens, Bradley San Jose E.E.gr. 10 Broadway,SJ-Bx529,sj
A.B., College of the Pacific, 1925; Engineer, Stanford, 1927
Crabtree, David M., Jr. San Francisco LD 89+35 114 Branner-*2104*
Craft, Benjamin Cole Cupertino Min. gr. 209 Union-*1326*
A.B., Stanford, 1928, Engineer, 1929
Craig, Carvel Bothin San Francisco Econ. 139+90 118 Toyon
Craig, Homer Theodore, Jr. Alameda Psych. 188+144 Chi Psi-*1648*
A.B., Stanford, 1929
Craig, John Charles Porterville LD 92+65 231 Branner-*2641*
[1]*Craig, Joseph Allen Long Beach S.Biol.gr. 1334 E.2d,L'ngBeach-lb
A.B., Stanford, 1923
Craig, Walter Early Phoenix, Ariz. LD 74+7 Phi Gamma Delta
Cramer, Elizabeth Palo Alto Engl.-P.Sp.180+53 675 Ch'n'g,P-p
A.B., Stanford, 1929
Cramer, Harold Davidson Campbell Pre-Med.90·49+54 105Sequoia-*836*
Cramer, Jerome Paul San Francisco LD 43+20 250 Encina
Cramer, Sterling Sherman Palo Alto S.Bus. gr. Barron Park, P-*1761*
A.B., Stanford, 1925, M.B.A., 1929

Crandall, Oliver Byrd San Antonio, Tex. Econ. 183+154 248 Toyon-*647*
A.B., Stanford, 1929
Crandall, Russell K. Klamath Falls, Ore. S.Engr. 50·185+59 136 Brnr.-*2217*
A.B., Stanford, 1929
[4]Crane, Amie Cordelia Toledo, Ohio Engl. gr. 268 Roble
A.B., Western College for Women, 1919
Crane, Katharine More Applegate Pol.S. 165+63 Kappa Kappa Gam.
Crane, Mary Emma Turlock Econ. 185+119 Chi Omega
A.B., Stanford, 1929
Cranston, John Montgomery Escondido Hist. 45·145+265 252 Toyon-*2142*
A.B., Stanford, 1929
Cranston, Ruth Eleanor Los Altos LD 42+7 Los Altos-la
[23][4]Crary, Catherine Palo Alto LD 16·31+21 371 Roble-*525*
[2][3]Crary, Leonard Lamson Burlingame Span. 180+70 Del. Tau Del.-*885*
A.B., Stanford, 1929
[2][3]Crary, Ralph Ward, Jr. Palo Alto Chem. 136+152 305 Union-*525*
Crary, Sherman Leonard Boone, Iowa Econ. 177+48 Delta Tau Del.-*885*
[5]Craven, Earl H. Palo Alto Econ. 90·44–12 1212Pknsn., P-*839*
[1]Craven, Wilson Palo Alto Law gr. Cardinal Ct., P-p
A.B., Stanford, 1925, J.D., 1929
[4]Crawford, Charles W. Santa Barbara LD ‡ 126 Encina
[4]Crawford, Edward Oklahoma City, Okla. LD 237 Toyon-*1646*
Crawford, Ivan Paul Palo Alto S.Engr. 90·33–18 467 Everett, P-p
Crawford, John Vickers Santa Ynez Mil.S. 5·175+59 Chi Psi-*2121*
A.B., Stanford, 1929
Crawford, Loyal Calvin Los Angeles LD 59+59 32 Encina-*1122*
Crawford, Thomas Harrison Los Angeles LD 46–12 29 Encina-*2121*
Creagh, MerrickWoodman San Francisco Law gr. 532 Encina-*1181*
A.B., Stanford, 1928
[11]Crebs, William J. Los Angeles Econ. 126+11 Delta Tau Del.-*1363*
[12]Cressler, Edward Payson Newton, Kans. LD 28–20 301 Encina-*1905*
Crever, James Willis, Jr. San Jose Pre-Med. 139+96 16 B'dway,SJ-sj
Crisler, Lewis Allen Los Angeles LD 85–9 Delta Upsilon
Crismon, Jefferson M. Los Angeles LD 93+86 611 Waverley, P-*2205*
Criswell, Howard Brady, Jr. Dallas, Tex. S.Bus. gr. 560 Encina
A.B., Stanford, 1927
Croad, J. Russell Calistoga Educ. gr. 229 Union-*531*
A.B., Chico State Teachers College, 1928; A.M., Stanford, 1929
[1]Crocker, Herbert Arthur San Francisco LD 16+13 334 Encina
Crocker, Walter Russell S. Australia Hist. gr. 562 Gerona-*1047*
Crofoot, Gladys Louise Oakland LD 85+60 Escondite Cottage-*N*
Croker, Richard Symonds San Rafael Zoöl. 185+140 114 Branner-*1631*
A.B., Stanford, 1929
[5]Cronstrom, Lynn L. Los Angeles Econ.-Acct. 18·74–13 17 Encina
[5]Crookshank, Ronald M. Santa Ana Econ. 90·49+47 115 Alma, P-*1121*
Crosbie, Violet Ann Huntington Park LD 77+21 169 Roble-*2736*
Crosby, Peter James Hayward Pol.S. 181+22 Kappa Sigma-*1326*
A.B., Stanford, 1929
[5]Cross, Charles Mumaw Stanford Univ. Geol. 140+100 309 Sequoia-*1206*
Cross, Henry Settle, Jr. Redlands LD 88+56 20 Branner
Crowley, Edward Joseph San Francisco Econ. 135·45+5 Phi Gamma Delta
A.B., Stanford, 1929
Crum, Rolland Abbott Richmond Med. gr. 2173 California, SF-sf
A.B., Heidelberg, 1926
[12]Crumly, Harold B. Woodlake S.Engr. 88–20 138 Branner
Crutchett, William L. Berkeley Med. gr. 923 Santa Fe, Berkeley-b
A.B., California, 1927

[1]Cruz, Eligio L. Pangasinan, P.I. Educ. gr. 801 Waverley, P-p
B.S., Philippines, 1928
Cull, James Buente Yakima, Wash. Chem. 138+148 209 Branner-*1527*
Culling, Adelbert Nevin Beverly Hills Econ.Ac. 144+147 241 Brnr.-*1049*
[3]Culver, Benjamin F. Palo Alto Soc.S.‡6+5 460Amh'st,M-*YMCA*
Cummings, Harold Roland Glendale Pre-Clin. 135·50+33 201 Un'n-*1934*
A.B., Stanford, 1929
¶Cummings, Margaret Emmett, Idaho Soc.S.-Jn.42·138+170 Dl.Gm.-*1366*
A.B., Stanford, 1929
Cummings, Marie E. Palo Alto LD 103+147 1230 Fulton, P-p
Cummins, J. Ferdinand Le Grand Hist. gr. 227 Sequoia
A.B., Stanford, 1928
Cummins, Rowan Palo Alto S.Engr. 128+31 Phi Sig. Kp.-*538*
[21]Cunan, Louis Raymond Richmond S.Engr. 94·31+12 424 Encina
Cundall, William Edward Berkeley Econ.45·87+30 Phi Sigma Kp.-*538*
[14]Cunning, Helen Ruth San Francisco Engl. 55·100+60 Chi Omega
Cunningham, C. Edwin South Pasadena S.Engr. 95·91+18 521 Encina-*1541*
A.B., Stanford, 1929
[4]Cupp, Ora May San Diego Educ. gr. 304 Roble-*555*
Ph.B., Chicago, 1912
[4]Cureton, West M. Stockton LD 107 Encina-*1202*
Curley, Robert Edward Menlo Heights Math. gr. Menlo Heights-*2474*
Ph.B., Chicago, 1925
Currie, William Ralph Cashmere, Wash. S.Bus. gr. 318 Emerson, P-p
A.B., Whitman, 1927
[4]Curtis, Dwight Wesley San Luis Obispo Hist. gr. 847 Bryant, P-p
A.B., College of the Pacific, 1923
[4]Curtis, Marie Elyce San Jose Educ. gr. 249 Washington, SJ-sj
A.B., San Jose State Teachers College, 1923
Curtis, Sue Redwood City Span. 15·187+198 249 Roble-*2631*
A.B., Stanford, 1929
Cushing, Maxine Abbott Hollywood Pol.S. 136+147 301 Roble-*2638*
[27]Custer, Howard Clifton Alhambra LD 60+26 316 Madroño-*962*
[12]Cuthbertson, Donald M. Mayfield Chem.90·64+12 3375El Cm.Real,M
Cuthbertson, Stuart Boulder, Colo. Fr. gr. 434 Kingsley, P-p
A.B., Illinois, 1917, A.M., 1924
Cutter, Daniel Charles San Francisco LD 90+84 Alpha Sigma Phi-*866*
[5]Cutter, Richard Deidrich Palo Alto Zoöl. 136+217 627 Webster, P-p
Cutting, Windsor C. Campbell Med. gr. 2321 Sacramento, SF-sf
A.B., Stanford, 1928
[3]Cypher, S. Clark Arcadia Educ. gr. Delta Chi-*1304*
A.B., Stanford, 1927
Dahnken, F. Carsten San Francisco Chem. 135·59+88 1330 Byron, P-p
A.B., Stanford, 1929
Dake, Leland Edmund San Francisco LD 90+60 Kappa Sigma-*1326*
[4]Dale, Frederick Harold Red Bluff Zoöl. gr. 363 S. 7th, SJ-sj
A.B., San Jose State Teachers College, 1928
Dales, John, Jr. Los Angeles Pol.S. 185+180 Del.Tau Del.-*1363*
A.B., Stanford, 1929
[5]Dalton, Swanton Dorse Beverly Hills Chem. 94+52 Kappa Sigma-*1326*
von Damm, Helene Burlingame Econ. 116+25 Sigma Kappa-*1327*
[1]Damsgard, Lincoln C. San Mateo Math. gr. 333 Minnie, SM-sm
A.B., Union, 1913
[4]Danford, Roy Edwin Oakland LD 124 Encina
[4]Dangberg, Evelyn San Jose Engl.-P.Sp. ‡ 593 Salvatierra
[13]Daniel, John, Jr. San Francisco LD 100+41 Phi Gamma Delta
Daniels, Albert C. Pueblo, Colo. Chem. 5·206+291 211 Toyon-*605*
A.B., Stanford, 1929

Daniels, Theodore Thomas	San Francisco	Econ. 151+14	Alpha Tau Omega
[2]Daugherty, Virginia Marie	Palo Alto	LD 15·31+4	376 Roble-*2352*
Davant, Sydney Madge	San Diego	Phyl. 115·45+32	227 Roble-*1223*
[12]David, Harold Williams	San Francisco	LD 43+36	445 Encina-*2114*
[4]David, Marguerite	Chemawa, Ore.	Engl. 147·	440 Cowper, P-p
[4]Davids, Lindsay	Berkeley	LD	120 Encina
Davidson, Elizabeth Nicoll	Santa Barbara	LD 48+66	284 Roble-*2413*
Davidson, Helena Lansing	Santa Barbara	Soc.S. 138+123	Kappa Kappa Gm.
[1]Davidson, Horace Hodge A.B., Stanford, 1929	Berkeley	Econ. 180+37	Kappa Alpha
[1]Davidson, William Waite A.B., Stanford, 1929	Burlington, Ia.	Engl.112·69+54	Wvly.Apt.,P-*1071*
[4]Davis, Anna Leonora Ed.B., California at Los Angeles, 1926	Pasadena	Math. gr.	353 Roble-*2422*
[5]Davis, Burt Lincoln, Jr. A.B., Stanford, 1929	Palo Alto	Econ. gr.	1505 Univ., P-p
[2]Davis, Charles Wesley	Palo Alto	Educ. gr.	1221 Middlefield, P-p
[12]Davis, Corinne A.B., Stanford, 1919, A.M., 1919	San Jose	Educ. gr.	59 S. 5th, SJ-sj
[6]Davis, Don Passmore	Long Beach	Econ. 80+0	Phi Kappa Psi
Davis, Francis Ellsworth	Oakland	LD 62+34	111 Encina-*92*
Davis, Fred Jay A.B., Stanford, 1929	Westwood	Pre-Clin.192+126	229Branner-*873*
[12]Davis, Gregory Hensley A.B., Stanford, 1928	Napa	Law gr.	535 Salvatierra-*1305*
Davis, James Kirkland A.B., Stanford, 1929	San Francisco	Econ. 181+83	Kappa Alpha
Davis, Marinita A.B., Mills, 1928; A.M., Stanford, 1929	Pacific Beach	Educ. gr.	171 Roble-*1743*
Davis, Nelson Beaumont, Jr.	Hollywood	LD 42+16	405 Encina-*1765*
Davis, Roland Chenoweth	San Francisco	LD 45+10	332 Encina-*707*
Davis, Spencer Edward	Los Angeles	LD 44+37	315 Encina
Davis, Stanley Spencer A.B., Stanford, 1928	Westwood	Med. gr.	2180 Washington, SF-sf
Dawson, Carlton Wolfley A.B., Stanford, 1929	Palo Alto	M.E. 187+100	535 Everett, P-p
Dawson, John Harlan A.B., Stanford, 1929	Altadena	Engl. 40·141+47	109 Branner-*1129*
[4]Dawson, Olive L.	Palo Alto	LD ‡ 31+16	309 Leland, P-p
[1]Dawson, Ray Elmer	Santa Ana	LD 63–4	Sigma Nu-*1385*
[4]Dawson, William Robert A.B., California, 1925	Oakland	Educ. gr.	257 Toyon
Day, Harriet Ring	San Francisco	LD 95+83	Alpha Omicron Pi-*1367*
[5]Day, Roscoe Arthur, Jr.	Oakland	LD 40–11	409 Encina
Daynes, Gerald Rich A.B., Stanford, 1929	Salt Lake City, Utah	Soc.S. 91·89+17	Sigma Chi-*628*
Dayton, John Gordon	Long Beach	Chem. 148+153	403 Sequoia-*1651*
[1]Deahl, John Linden, Jr.	San Francisco	Pol.S. 94+5	Phi Kappa Sigma
Deahl, Katharine	San Francisco	Psych. 135+13	Gam.Phi Beta-*1337*
Deakers, Roderick Paul A.B., Stanford, 1928	Los Angeles	Med. gr.	2321 Sacramento, SF-sf
Deal, Bonnye Elizabeth A.B., Stanford, 1928	Pasadena	Psych. gr.	119 Roble-*1146*
Dearborn, Terry Hamilton	Blythe	LD 78+6	538 Encina-*2721*
[4]Deck, John, Jr.	Santa Monica	LD ‡	318 Union-*1796*
Decker, Richard Warren	Oakland	LD 66+19	235 Branner-*573*
Decker, Thomas Ray	Oakland	LD 75–12	Delta Upsilon

DeCou, Herbert Wesley — San Leandro — Econ. 147+43 — Kappa Sigma-*1326*
[14]DeGroot, Dudley S. — Menlo Park — Educ. gr. — Menlo School, MP-mp
A.B., Stanford, 1924
DeGroot, Edward B., Jr. — Sierra Madre — LD 69+49 — Phi Delta Theta
van Deinse, Francina Christina — Pasadena — LD 31–2 — 273 Roble-*1662*
Deirup, Theodora Edith — Chico — Span. 134+112 — Del.Del.Del.-*1325*
[4]Delano, Narcissa — San Diego — Educ. ‡ — 178 Roble-*563*
Delphey, William E. — Chino — Med. gr. — 2402 California, SF-sf
A.B., Southern California, 1926
DeLucchi, Joseph Dominic — San Francisco — LD sp. 89+12 — 208 Branner-*2665*
DeMotte, Theodore Mitchell — Ukiah — LD 102+179 — 115 Branner-*2665*
Denney, Albert Lord — Los Angeles — LD 95+59 — Alpha Tau Omega-*1384*
Dennis, Walter James, Jr. — Portland, Ore. — S.Engr.5·178+23 — 305Branner-*1403*
A.B., Stanford, 1929
[12]Dentraygues, Jean — Burlingame — M.E. gr. — 234 Union-*2214*
A.B., Stanford, 1928, Engineer, 1929
[4]Dermody, George Steele — Los Altos — Educ. gr. — Los Altos-Box 54, la
A.B., San Jose State Teachers College, 1928
[1]Desjardins, Ulise J. — Coral Gables, Fla. — LD 35–9 — Boat House-*2024*
De Smet, Delbert Henry — San Jose — Pre-Med.101·43+61 — 482Hks,SJ-sj
[4]DeSmith, Edwin — Redwood City — Educ. gr. — 945 Iris, RC-rc
Ph.B., Denver, 1920
[4]De Sombre, William — Anaheim — Educ. gr. — 241 Toyon-*625*
Ph.B., Chicago, 1902
Deuel, John Bockee — Santa Barbara — LD *27–2* — 305 Encina-*1825*
Devereux, John William — Honolulu, T.H. — Pre-Md.105·46+12 — 627Hmr,P-*633*
Devlin, Berchman Rapp — San Francisco — Econ. 101+31 — Phi Delta Theta
[34]Devlin, Leo John, Jr. — San Francisco — S.Engr. 96+33 — Phi Delta Theta
[34]DeVore, Emily — Glendale — Educ. gr. — 745 E. William, SJ-sj
B.S., Columbia, 1927
[3]Dewey, George G. — Palo Alto — Educ. gr. — 563 Homer, P-p
B.S., Oregon State Agricultural, 1915
[12]Dewlaney, Barbara Constance — Palo Alto — Soc.S.-Jn. gr. — 553Salvatierra-*1039*
A.B., Stanford, 1927, A.M., 1929
Dexter, Gregory George — Hillsborough — Econ.90·61+16 — StanfordFireDept.
Diaz, J. Thomas — Cuzco, Peru — LD 88+62 — 561 Mdfield,P-Bx 304,p
Dibble, Dan — Portland, Ore. — LD 36–13 — 232 Encina-*2661*
[4]Dick, Robert Lewis — Portland, Ore. — LD ‡ — 140 Encina-*602*
[1]Dickenson, Charles W. — Madison, Tenn. — Law gr. — 718 Bryant, P-p
A.B., Stanford, 1926
Dickenson, Richard Wagner — Stockton — LD 45+56 — 116 Encina-*1008*
Dickey, David B. — Donna, Texas — LD 44+60 — 511 Bowdoin, M-*1884*
[24]Dickie, Gordon — Vancouver, B.C. — Econ. gr. — 760 Webster, P-p
A.M., Harvard Divinity School, 1901
[4]Dickinson, Helen — Los Angeles — LD ‡ — 300 Roble
[4]Dickson, Allie Rutherford — Dickinson, N.D. — Engl. gr. — 352 Roble
A.B., North Dakota, 1913
Dienstein, William — Taft — LD 94+56 — 246 Toyon-*2632*
Dietrich, Frank Sigel — Boise, Idaho — Pre-Med. 138+111 — 228 Brnr.-*1704*
[5]Dietrich, Stephen Mann — Stockton — Pol.S. 124+114 — 203 Toyon-*2668*
Dietz, Fred C. — Oakland — LD 39+17 — 229 Encina
[5]DiIullo, Daniel Carlo — Denver, Colo. — Pre-Med. 120+35 — Th.Del.Chi-*1828*
Dill, Walter John, Jr. — Los Angeles — Econ. 155+5 — Alpha Sigma Phi-*1357*
[5]Dill, William Abbott — San Mateo — S.Biol.90·34+26 — 570 Mayfield-*1332*
[4]Dillenburg, Rose H. — San Jose — Span.‡14+15 — 600 Arguello, RC-rc
Dilley, Clark David, Jr. — Glendale — Law gr. — 545 Encina-*1097*
A.B., Stanford, 1928

[5]Dillon, Edward Thomas	Los Angeles	Econ.139+83	Delta Kappa Epsilon
[5]Dixit, Kanhaiya Lall	Buland Shahr, India	Educ. 3-141–2	1130 Cal., M-*1066*
Dixon, Harry Sterling	Knights Landing	LD 101+84	171 Emerson, P-p
Dixon, Phil Raymond	Oakland	LD 61+10	362 Encina-*501*
[5]Djung, Lu Dzai	Kwangtung, China	Educ. gr.	Chinese Club-*596*
A.B., Shanghai, 1923, A.M., 1927			
Doane, Donald Calvin	Stanford Univ.	Econ. 157–7	*762* Dolores
Dobbel, Charles Arthur	Palo Alto	Min. gr.	1532 California, M-*1455*
A.B., Stanford, 1921			
Dodd, Onslow Sinclair	Palo Alto	Law gr.	1020 Ramona, P-p
A.B., Stanford, 1927			
Dodge, Horace Jackson	Washington, D.C.	LD 46+57	448 Encina-*571*
[2c]Dodson, Lawrence Edgar	Palo Alto	LD 30–3	187 Bryant, P-p
Doeg, John Hope	Santa Monica	LD 56+2	Delta Kappa Epsilon
Doerr, Albert Edward	Mexico	S.Engr. 136+65	Delta Kappa Eps.
[23]Dohrmann, George W., Jr.	Stockton	LD 68+5	Delta Upsilon
Dohrmann, Jack Fred	San Francisco	S.Engr.10-123+15	Phi Sig.Kp.-*538*
Dohrmann, Louise J.	San Francisco	LD 91+117	Kappa Kappa Gamma
[1]Dohrmann, Robert Louis	San Francisco	LD 34–9	Phi Kappa Psi
[5]Dole, Richard Alexander	Honolulu, T.H.	LD 66+17	Phi Sigma Kappa-*538*
Dole, Wilfred H.	Hoaquiam, Wash.	LD 46+20	250 Encina
[5]Doll, Cecil Thane	Redondo Beach	Econ. 175+104	Sigma Chi-*628*
[1]Domoto, Takazo	Oakland	LD 56–7	1425 Alma, P-*1321*
Domoto, Wakako	Oakland	LD 47+33	324 Roble-*1734*
Doner, Sidney Stoddard	Santa Barbara	S.Bus. gr.	501 Encina-*2175*
A.B., Stanford, 1928			
Dong, Collin Henry	Watsonville	Med. gr.	2107½ Webster, SF-sf
A.B., California, 1926			
[4]Donlon, Denise Damian	Antioch	LD ‡	165 Roble
[4]Donlon, Peter Albert	Antioch	LD	106 Encina
[12]Donnay,JosephD.H.	Waremme,Belgium	Geol. gr.	6 Union-*1532*
Engineer, Liége, 1925; Ph.D., Stanford, 1929			
[4]Donohoe, Ruth Mary	Atherton	Educ. gr.	Atherton-Box 242, mp
A.B., College of the Sacred Heart, 1929			
[4]Doolittle, Dorothy Isabel	San Bernardino	Educ. gr.	230 Roble-*664*
A.B., Pomona, 1925			
[4]Doolittle, Ruth Moore	Pomona	Ed.-G.A. gr.	358 Roble
A.B., Santa Barbara State Teachers College, 1927			
Doran, Madeleine Kathryn	San Diego	Engl. gr.	1245 Webster, P-*2503*
A.B., Stanford, 1927			
Dorchak, Alexander	Belt, Mont.	LD 44+28	45 Encina-*1753*
Dorman, Raphael M.	Santa Fe, N.M.	LD 37–5	*236* Encina-*695*
[12]Dorn, Conrad L.	Kelseyville	LD 70+5	130 Branner-*2574*
Dorn, Lewis Robert	Kelseyville	LD 38–9	325 Encina
Dorn, Nancy Elizabeth	Kelseyville	Soc.S. 181+165	Sigma Kappa-*1327*
A.B., Stanford, 1929			
[4]Dorroh, Mary Lucile	Kennedy, Ala.	Engl. gr.	*379* Roble
A.B., Howard, 1924			
[4]Doty, Jack	Los Gatos	Educ.gr.	671 E.Washington,SJ-sj
B.S., Kansas State Teachers College, 1922			
Doub, William Kelsey	Berkeley	LD 47+41	20 Encina-*731*
[4]Doughty, Janet Long	San Mateo	LD ‡	859 Highland, SM-sm
Dow, Kenneth Adams	Redlands	Law 146+29	Alpha Sig. Phi-*1357*
Dow, Lloyd Wilson	Oakland	Econ. 148–9	Theta Del. Chi-*1828*
[4]Dow, Robert Speer	Redlands	LD	312 Union-*1486*
Dow, Wallace Allen	Piedmont	Econ. 93-45–9	414 Emerson, P-p

Dowell, Virgil C.	Lindsay	Pol.S. 149+45	Phi Kappa Psi
[4]Dowling, Margaret C.	San Francisco	Educ. gr.	321 Roble-*1145*
B.L., California, 1904			
Downey, Wallace K.	San Francisco	Law gr.	321 Union-*1363*
A.B., Stanford, 1927			
Downing, Helen Louise	Norman, Okla.	LD 21·80+64	Kappa Kappa Gam.
[5]Doyle, Elizabeth	Fresno	Hist. gr.	Pi Beta Phi-*1918*
A.B., Stanford, 1929			
[4]Doyle, Eva Gertrude	Santa Ana	Fr. gr.	324 Roble-*507*
A.B., Pomona, 1926			
Doyle, Jack	Cincinnati, Ohio	LD 44+4	44 Encina-*2482*
Doyle, John Joseph	Foxboro, Mass.	Educ. 135·48+50	209 Sequoia
A.B., Stanford, 1929			
Doyle, Katherine Edith	Menlo Park	S.Biol. 180+125	MP-Box 674, mp
A.B., Stanford, 1929			
Doyle, Laird Houston	Los Angeles	Engl. 158+66	Chi Psi-*1648*
Doyle, Morris MacKnight	Berkeley	Phil. 183+124	Phi Kappa Sigma
A.B., Stanford, 1929			
[4]Doyle, Virginia	Fresno	Engl. gr.	583 Lagunita-*1918*
A.B., Stanford, 1926			
[4]Drake, Auretta Williams	Stanford Univ.	LD ‡	Convalescent Home-*1618*
[4]Drake, Judson Ashley	Long Beach	LD ‡	122 Toyon-*990*
[5]Draper, Murray	San Bernardino	Law gr.	331 Union-*2668*
A.B., Stanford, 1929			
[4]Dreier, David Collin	Shawano, Wis.	Law gr.	105 Encina-*882*
Graduate, U.S. Naval Academy, 1925			
Dresia, William Frederick	Miami, Okla.	Chem. gr.	834 Kipling, P-p
B.S., Oklahoma, 1927; A.M., Stanford, 1929			
Drew, KatherineMacArthur	San Francisco	Engl.-P.Sp. 134+116	263Rbl.-*2732*
[12]Drew, Reginald Eastman	Palo Alto	S.Engr.55·113+27	159Kellogg,P-p
Dreyfus, Benjamin Ballinger	San Mateo	LD 92+65	19 Toyon-*2202*
[6]Dreyfus, Francis Peter	San Mateo	LD	207 Union
Driggs, E. Ogden	Oakland	S.Engr.22·133+120	Al.T.Om.-*1384*
[5]Driscoll, Alfred Hamilton	Hollywood	Law gr.	450 El Escarpado-*2191*
A.B., California at Los Angeles, 1927			
Driscoll, John Lawrason	San Mateo	Econ.132+29	Delta Kappa Epsilon
[5]Driscoll, Thomas Albert	San Mateo	Econ. 105+4	Delta Kappa Epsilon
Druehl, Hugo William	San Francisco	LD 47+37	330 Encina
[4]Drugg, Rebecca Roisner	Menlo Park	Educ. ‡	Menlo Park-*803*
[4]Drullard, Howard Raymond	Palo Alto	LD sp.	1648 California, P-*1455*
Drury, Marion Overholser	Ponce, P.R.	C.E. gr.	326 Waverley, P
B.S., Otterbein, 1926			
[23]Drury, Virginia Helen	Palo Alto	Engl. 67·88+1	566 Lincoln, P-p
[4]Drysdale, Faye Hunt	Palo Alto	Engl. gr.	451 Lytton, P-Box 533,p
A.B., Stanford, 1922			
Dubinski, Leo	El Paso, Texas	S.Engr. 90·90+122	438 Encina-*615*
A.B., Stanford, 1929			
DuBois, Robert	Palo Alto	Chem. gr.	129 Emerson, P-p
A.B., Carleton, 1918; M.S., Oklahoma Agricultural, 1919; Ph.D., Stanford, 1929			
[5]Duckett, Harold Leslie, Jr.	Hollywood	Law gr.	Alpha Delta Phi-*J*
A.B., Stanford, 1929			
[23]Dudfield, John J.	Palo Alto	LD 61·22–10	625 Hale, P-p
[4]Dugger, Ellis Dean	Superior, Ariz.	Educ. gr.	Sigma Chi
A.B., Kentucky, 1926			
Dunbar, Ernest Albert	Palo Alto	Min. 39·136+26	1550 Calif., M-m
Dunbar, Francis Flanders	Manchester,Vt.	Bot. gr.	355 Kellogg, P-p
A.B., Harvard, 1928; A.M., Stanford, 1929			

[3]Duncan, Carl Dudley — Stanford Univ. — Zoöl. gr. — University Park-*4*
A.B., Stanford, 1923, A.M., 1928
Duncan, Gilmore Adelbert — Campbell — Educ.180+106 — 728Cal.M-Bx258,m
A.B., Stanford, 1929
[5]Duncan, Harold M. — Los Angeles — Econ. 45·122+64 — 121 Wilson, P-p
Duncan, Philip C. — Virginia City, Mont. — Law gr. — 310 Sequoia-*646*
A.B., Stanford, 1927, J.D., 1929
Duncan, Sheldon Forbes — Piedmont — LD 77+18 — Kappa Alpha-*133*
Dungan, John Anthony — Exeter — Econ. 180+35 — Kappa Sigma-*1326*
A.B., Stanford, 1929
Duniway, Ben Cushing — Northfield, Minn. — Law gr. — 539 Encina-*2591*
A.B., Carleton, 1928
Dunlap, George Wesley — Sonora — LD 91+82 — 129 Emerson, P-p
Dunlap, Sue Betty — Los Angeles — LD 69+45 — Kappa Kappa Gamma
[5]Dunn, Edwin Genyaun — Canton, China — Soc.S.-Jn. gr. — 168 University, P-p
A.B., Stanford, 1929
[1]Dunn, Frank McAllister — San Francisco — Econ. 180+50 — Alpha Delta Phi-*J*
A.B., Stanford, 1929
[4]Dunn, Gerald Camarillo — Los Angeles — LD — 140 Toyon
Dunn, Oliver Charles — Los Angeles — Phil. 133+82 — Chi Psi-*1648*
Dunn, Robert Douglas — Stinson Beach — Med. gr. — 3625 Jackson, SF-sf
A.B., California, 1926
[4]Dunne, Robert Elmer — San Francisco — LD — Menlo Park-RFD 255, mp
Durbin, Robert Alexander — Walnut Grove — LD 39–14 — 128 Encina-*2545*
Durfey, Janette — Fresno — Engl.86·77+68 — Alpha Om. Pi-*1367*
Durkee, William Bennett — Santa Barbara — LD 31–11 — 325 Encina
Durst, Edwin Waldon — Mt. Vernon, N.Y. — Econ. 135·47+0 — 215 Union-*105*
A.B., Stanford, 1929
Duryea, Helena — Palo Alto — Hist. 134+65 — 328 Roble
[28]Dutton, Gayle Roberds — Los Altos — Chem. 159+145 — Los Altos-*147*
[12]Dutton, John Chester — San Francisco — Econ. 25·60–17 — Zeta Psi-*B*
Dutton, Mona B. — San Francisco — Phil.137+111 — Kappa Alpha Theta
Dutton, S. Fletcher — Carmel — Econ. 140+143 — 213 Toyon-*1161*
Dyche, Frederick Ernest — Wichita, Kans. — Educ. gr. — 645 Gilman, P-p
A.B., Wichita, 1918
[5]Dyer, Guy Kimball — Auburn — Law gr. — Sigma Nu-*1385*
A.B., Stanford, 1929
Dyer, Hector Monroe — Inglewood — LD 94+44 — Delta Kappa Epsilon
[3]Dyer, Richard Ward — Oakland — LD 38–5 — 404 Sequoia
[4]Dykmans, Wilhelmina A. — San Jose — Engl.-P.Sp. gr. — 247 Everett, P-p
A.B., California, 1922
[1]Dysart, Birney — Phoenix, Ariz. — E.E. gr. — 310 Union-*2516*
B.S., Northwestern, 1927; Engineer, Stanford, 1929
Eardley, Carl Lindberg — Los Angeles — Law gr. — 316 Union-*1163*
A.B., Stanford, 1927
[12]Earl, Orrin Kinsley, Jr. — Altadena — LD 78+103 — Phi Gamma Delta
Eastman, George Lockwood — Hollywood — LD 90+109 — Alpha Delta Phi *J*
[1]Eastman, Robert Allen — Glendale — Pol.S. 101·80+31 — 225 Kipling, P-p
A.B., Stanford, 1929
Easton, Edward Montague — La Jolla — LD 93+68 — Alpha Delta Phi-*J*
[14]Easton, George W. — San Francisco — LD — 353 Encina-*1796*
Eaton, Arthur James — Watsonville — Econ. 185+166 — Sigma Nu-*1385*
A.B., Stanford, 1929
[5]Eaton, Bourne Goodridge — San Francisco — Phys. gr. — 534 Encina-*1205*
A.B., Stanford, 1929
[4]Ebel, Bartel Edward — Redlands — Germ. gr. — 206 Union-*819*
A.B., McPherson, 1909; A.M., Kansas, 1910

Eberhart, George Perrin	Piedmont	LD 87+33	136 Toyon-*824*
[4]Eberhart, Roland Fred A.B., Stanford, 1917	San Jose	Engl. gr.	13 Toyon
Ebey, Ellison Frederick	Berkeley	LD 56+19	408 Encina-*1076*
[28]Ebey, George William A.B., Stanford, 1929	San Jose	Econ. 100·80+78	422 Bird, SJ-sj
[4]Eby, Ida Bel A.B., Pacific University, 1909	Los Angeles	Cl.Lit. gr.	316 Roble-*504*
Eckart, Harriet Louise	Pasadena	LD 88+42	Kappa Kappa Gamma
[1]Ecklon, C. Lawrence A.B., Stanford, 1928	San Francisco	S.Bus. gr.	Phi Kappa Sigma
Eddie, Charles Park	Los Angeles	Pol.S. 148+61	Delta Tau Del.-*1363*
[5]Ede, Raymond Charles B.S., Nevada, 1927	Loyalton	Fr. gr.	323 Union-*949*
Edelman, Bertram Stanley A.B., Stanford, 1929	San Francisco	Econ. 70·110+25	500 Encina
[4]Edger, Herbert Downing	San Francisco	LD	132 Toyon
[4]Edgerton, Amélie Francis	Santa Barbara	Econ. ‡	169 Roble-*1495*
Edgren, Robert Durand A.B., Stanford, 1929	Pacific Grove	Mil.S. 5·179+203	216 Toyon-*1468*
Edmonds, Rowland Ward	Chula Vista	Chem. 172+88	114 Encina
Edmonds, Warner, Jr.	Chula Vista	LD 91+67	Phi Kappa Sigma
[1]Edsall, Geoffrey	Cambridge, Mass.	LD 76·	409 Encina-*1461*
Edson, Charles Farwell, Jr. A.B., Stanford, 1929	Palo Alto	Cl.Lit. 182+67	181 Lytton, P-p
Edwards, Alice May A.B., Stanford, 1929	San Jose	Soc.S. 180+98	Kappa Kappa Gam.
Edwards, Ambrose Y. A.B., Stanford, 1929	Greenville, Texas	Econ. 90·93+100	438 Encina-*547*
Edwards, David Samuel, Jr.	Piedmont	LD 47+23	111 Encina-*1953*
Edwards, Martha Frances	San Jose	LD 46+46	272 Roble-*1814*
[4]Edwards, Page Lawrence	Hollywood	LD	224 Union-*1298*
[4]Edwards, Raymond Elbert	Hollywood	LD ‡	Cardinal Hotel, P-p
[2]Edwards, Sumner Tarpey	San Francisco	LD 29·30–17	Cardinal Hotel, P-p
Edy, John North B.S., Missouri, 1905; A.M., California, 1926	Berkeley	Pol.S. gr.	854 Euclid, B-b
Eells, John Shepard, Jr. A.B., Yale, 1928	Ross	Law gr.	637 Alvarado-*2412*
Eells, Sarah Lucia	Ross	Hist. 103+34	Kappa Alpha Theta
Effron, Leonard L.	San Diego	LD 47+35	350 Encina-*2236*
[4]Eggert, Joseph Anthony A.B., Manhattan, 1926	San Francisco	Phil. gr.	Sacred Heart Col., SF-sf
Ehrhorn, Charles Springer	Balboa	LD 16·72+3	Sigma Nu-*1385*
[5]Ehrman, Alexis L., Jr.	Menlo Park	Econ. 166+28	258 Toyon-*2046*
[5]Ehrman, Thomas Daniel	Menlo Park	LD 68+17	121 Toyon-*2665*
Eichelberger, Harry Martin	Los Angeles	LD 38–3	218 Encina-*722*
[1]Eidenmuller, Mervyn C.	San Francisco	LD 19+0	942 Ramona, P-p
[28]Eisner, Robert Milton	San Francisco	LD 30+7	352 Encina
[134]Eklof, Carl M. B.S., Idaho, 1916	San Francisco	Educ. gr.	1216 Taylor, SF-sf
Eldridge, John Harman	Burlingame	Econ.-Acct. 90·50+63	417 Encina
Eldridge, Samuel Engineer, Colorado School of Mines, 1924	San Mateo	Med. gr.	275 Colon, SF-sf
Elges, Theodore Grant A.B., Nevada, 1924	Reno, Nev.	Law gr.	128 Kingsley, P-p
[5]Elias, Ted J. A.B., Stanford, 1928	Los Angeles	Law gr.	741 Addison, P-*90*

Elkins, Beatrice Adelma	Palo Alto	LD 91+70	1100 Fulton, P-p
[4]Elkins, John Courtland	Santa Rosa	Span.86·50+32	BuenaVistaCmp,M
Elkus, Charles A. A.B., Stanford, 1929	San Francisco	Econ. 182+20	228 Sequoia-*968*
[4]Elkus, Ruth	San Francisco	Hist. ‡	331 Roble-*2811*
[12]Ellington, Will Boyd A.B., Stanford, 1927	Palo Alto	Educ. gr.	115 Fulton, P-p
Elliott, Edwin Windsor	Long Beach	Soc.S. 45·86+28	Sigma Chi-*628*
[24]Elliott, Loyd Creighton B.S., Arizona, 1913	Phoenix, Ariz.	Educ. gr.	700 Amherst, M-*606*
[5]Ellis, Agler B.	Stockton	Law 37·80+64	230 Union-*1005*
[3]Ellis, Reta Evelyn	Bakersfield	Educ. 82·49+47	203 Roble
[5]Ellis, William Percival	St. Helena	LD 39+13	43 Encina
[1]Ellsworth, George I. A.B., Stanford, 1929	Grass Valley	Hist. 180+43	314 Union-*682*
Elmer, Anton D. A.B., Stanford, 1929	Manila, P.I.	Phyl.-Med.193+136	764 Ch'n'ng, P
Elting, John Robert	Billings, Mont.	LD 41+19	208 Encina
Elwood, Wayne	Hollywood	LD 44+34	406 Encina-*2823*
[5]Ely, Bernard Colean A.B., Stanford, 1929	Bakersfield	Pol.S. gr.	557 Hamilton, P-*996*
Emry, Merle Frederic	Palo Alto	Soc.S.-Jn.137+159	Del.T.Dl.-*1363*
Engle, Rebecca Jane	Palo Alto	LD 43·43+25	737 Bryant, P-p
English, George Duncan	San Francisco	Econ. 111+41	131 Branner-*2757*
English, William Ernest	San Francisco	LD 45–5	322 Encina-*2757*
Engwicht, Harry A.B., Stanford, 1926	San Jose	Phys. gr.	405 N. 3rd, SJ-sj
[1]Enterline, Elmer E., Jr.	Los Angeles	LD 7·113+132	242 Branner-*147*
Erickson, Elvira Alida A.B., Stanford, 1928	Weed	S.Bus. gr.	302 Roble-*2345*
Erickson, Herbert S. A.B., Willamette, 1926	Salem, Ore.	S.Bus. gr.	301 Union-*2197*
Erlin, Elizabeth	Palo Alto	LD 48+64	356 Roble-*116*
Erlin, Frank William, Jr.	Palo Alto	S.Engr. 153+99	200 Coleridge, P-p
[4]Erskine, James Donald	Detroit, Mich.	LD	114 Toyon-*1096*
[13]Ersunoff, Vladimir I.	San Francisco	LD 14–15	415 Laguna, SF-sf
Esberg, Alfred Mendel	San Francisco	S.Engr. 137+113	241 Toyon-*1140*
[4]Eschen, Lee, Jr.	San Francisco	Econ. ‡	759 Middlefield, P-p
Escher, Earl Winston B.S., Arizona, 1925	Prescott, Ariz.	Med. gr.	2321 Sacramento, SF-sf
[12]Espinosa, Aurelio M., Jr. A.B., Stanford, 1927, A.M., 1928	Stanford Univ.	Span. gr.	570 Salvatierra-*1555*
[5]Espinosa, J. Manuel	Stanford Univ.	Hist.109+118	570 Salvatierra-*1555*
[4]Espinosa, Margarita A.B., Stanford, 1927, A.M., 1928	Stanford Univ.	Span. gr.	570 Salvatierra-*1555*
[1]Esseley, Fridel Boris B.S., California, 1925	San Francisco	Law gr.	400 Octavia, SF-sf
von Estorff, Fritz E. A.B., Stanford, 1928	Potsdam, Ger.	Geol. gr.	523 Encina-*939*
[124]Etter, William Kirby A.B., Stanford, 1929	Los Angeles	Hist. gr.	115 Alma, P-p
Euler, Theodore Edward	San Francisco	Econ. 90·43+9	317 Sequoia-*504*
Evans, George L. A.B., Stanford, 1929	San Jose	Econ.-Ac.90·97+34	36S.13th,SJ-sj
Evans, J. Clinton	Twin Falls, Idaho	LD 94+95	135 Toyon-*972*
[1]Evans, Lucy Maud A.B., Stanford, 1929	Palo Alto	Hist. 88·99+132	519 Webster, P-p

Evans, Mariana	Riverside	Psych. 140+129	Pi Beta Phi-*1918*
Evans, Tindall	Cananea, Sonora, Mexico	Econ. 122+11	Phi Kappa Sigma
Evans, Victor B.	Los Altos	LD 42+1	LA-Box 19, Rt. 1, la
[12]Evans, Warren Raymond A.B., Stanford, 1929	Shelby, Mont.	Econ. 180+68	360 Bryant, P-p
Evans, William Augustus A.B., Stanford, 1927	Naco, Ariz.	Law gr.	Phi Kappa Sigma
[12]Everett, Lyle Benton A.B., Stanford, 1929	Santa Rosa	C.E. 208+34	Phi Gamma Delta
[4]Everett, Ralph Waldo A.B., Stanford, 1903	Sacramento	Hist. gr.	Mayfield-*2293*
[4]Evers, Wendell H. G. A.B., Stanford, 1926	Biggs	Educ. gr.	128 Kingsley, P
[12]Ewing, Edwina A.B., Stanford, 1929	Palo Alto	Eng.-P.Sp.181+155	1521 Ems.,P-p
Ewing, Roy Emerson	Mill Valley	LD 27+0	236 Encina-*2107*
Exelby, Paul A.B., Stanford, 1927	Los Angeles	Med. gr.	2422 Clay, SF-sf
[4]Facer, Alice Woodsum	Los Altos	LD ‡	Los Altos-Rt. 1, Box 391, la
[13]Fagerberg, Dixon, Jr.	Prescott, Ariz.	LD 93+144	233 Branner-*667*
Fair, Esther Elizabeth A.B., Stanford, 1929	San Jose	S.Biol. gr.	Delta Delta Delta-*1325*
Fair, J. Wilbur	San Jose	LD 91+83	210 Branner-*2757*
Fairbairn, Edwin Alexander A.B., Stanford, 1929	Sacramento	C.E. gr.	405 Sequoia-*2636*
Falger, William, Jr.	Modesto	Econ. 90·43–7	429 Encina
Falk, Karl	Piedmont	LD 48+87	318 Encina-*1101*
Fallon, Joseph Patrick, Jr.	Atherton	LD 60+2	Ashfield Rd., A-*1057*
Fannin, Paul Jones	Phoenix, Ariz.	Econ. 88·45+19	Kappa Sigma-*1326*
[4]Farber, Leslie Hillel	Douglas, Ariz.	LD	111 Toyon-*616*
[13]Farewell, Cyrus A.B., Stanford, 1929	Burlingame	Pol.S. 180+136	Kappa Sigma-*1326*
Farman, Belle A.B., Nebraska, 1923	Lincoln, Neb.	Engl. gr.	Kingscote-*965*
Farmer, Peggy	San Gabriel	LD 91+61	Gamma Phi Beta-*1337*
Farrand, Stephen McKevett	Los Angeles	Engl.-P.Sp.91+12	427Wbs.,P-*1971*
Farrar, Laurence A. A.B., Stanford, 1929	Stockton	Econ. 128·52+7	553 Salvatierra
Farrier, George Franklin	San Jose	LD 89+2	1328 Lincoln, SJ-sj
[3]Farrington, Theo Kirk	San Jose	Econ. 45·61–22	Kappa Alpha
Farwell, Lyndon A.B., Stanford, 1929	Los Gatos	S.Engr. 15·179+105	222 Seq.-*2112*
Faulb, Jared A. A.B., Stanford, 1929	Cleveland, Ohio	Econ. 120·60+61	232 Branner-*1189*
Faulkner, William Kenneth A.B., Southern California, 1928	Los Angeles	Min. gr.	Kingscote-*2151*
Faus, Norton Taft	Salt Lake City, Utah	LD 91+34	Theta Xi
[13]Favre, Marise Eugenie	Spokane, Wash.	LD 79·	232 Roble-*2284*
Fawcett, Vance Wilbur	Hollywood	LD 78–2	Delta Kappa Epsilon
[5]Fehling, Milton Holden A.B., Michigan, 1920	Mayfield	Econ. gr.	686 Colum.,M-Bx 902,m
Feldheym, Jean Spencer	San Mateo	LD 87+84	316 Sequoia
Feliz, George Comte	Santa Rosa	Econ. 90·45+49	307 Sequoia-*1904*
[5]Fell, Walter J.	Pasadena	Econ. 170+8	Phi Kappa Sigma
Fellows, Frederick D. A.B., Stanford, 1928	Santa Rosa	Med. gr.	2207 Buchanan, SF-sf
[2]Ferguson, Chesley G.	Berkeley	S.Engr.18·84–27	Al.Sig.Phi-*1357*

[4]Ferguson, Lida Madge	San Francisco	LD ‡	355 Roble
Ferguson, Miriam Claire	Terra Bella	LD 38–5	173 Roble-*2323*
Ferl, Alan McDonald	Long Beach	LD 16–19	139 Encina
Ferns, John Hamilton	Burlingame	S.Engr. 158+159	303 Sequoia
Fernstrom, John Archie	Napa	S.Engr. 118+15	410 Encina-*847*
Ferrante, Peter Joseph A.B., Stanford, 1928	Monterey	Law gr.	243 Toyon-*43*
Ferrebee, Joseph Wiley	Auburn	Chem. 90·42+59	304 Sequoia
[4]Ferry, Charlotte	San Francisco	LD ‡	355 Roble
[4]Ferry, Ebenezer Thomas A.B., Macalester, 1903	Worland, Wyo.	Educ. gr.	Sunnyvale-Box 826, s
Ferry, John Douglass	Rogue River, Ore.	LD 49+98	233 Encina
Fickert, Marshall Marron	San Francisco	S.Engr. 179+31	222 Toyon-*677*
[4]Fidel, Marie Kathryn	Wrights	LD ‡	302 Roble
[4]Field, Charles Devoe	Alhambra	LD	325 Union-*815*
[23]Field, Edward Winter	Orange	Econ.90·28–5	555 Wav'ley,P-*2016*
Field, Ross Haskins A.B., Stanford, 1929	Santa Ana	Geol.90·105+61	1492 Via Pal.-*2031*
Fifield, Walter Walworth A.B., Southern California, 1920, A.M., 1925	Los Angeles	Hist. gr.	530 Webster, P-p
Filley, Robert Barnard	San Marino	LD 90+39	447 Encina-*1197*
[23]Finch, David Ward A.B., Stanford, 1929	Oakland	Engl.-P.Sp.88·96+124	536 Encina
Finch, Nathan Cochrane	Glendale	LD 90+40	Delta Upsilon
Findley, Gordon Edward	Palo Alto	LD 82+13	Zeta Psi-*B*
Fingado, Jack Lankenau A.B., Stanford, 1929	Sacramento	S.Engr. 94·91+55	228 Sequoia-*23*
Fink, Emil Edward	Lodi	Econ.46·105+43	Phi Sig. Kap.-*538*
Finley, William Edward A.B., San Jose State Teachers College, 1928	San Jose	Educ. gr.	900 Waverley, P-p
[4]Finnegan, Andrew Jackson	Sacramento	Educ. 107·19+0	555 Lytton, P-p
[4]Finney, Margaret May	Fresno	Educ. ‡ 18+1	583 Lagunita-*1918*
[4]Finnie, Alice Lottie	North Bend, Ore.	LD ‡	661 Columbia, M-*1037*
[23]Firth, James Spencer	San Francisco	LD 25–3	140 Encina
Fisher, Caroline Eileen	San Francisco	LD 42–3	175 Roble-*2232*
Fisher, Elmer Howard A.B., Stanford, 1928, Engineer, 1929	Santa Cruz	E.E. gr.	313 Union-*2287*
[124]Fisher, Lewis Benedict	Portland, Ore.	LD 12–11	119 Encina-*2293*
[5]Fisher, Mary Betts	Portland, Ore.	Soc.S. 132+60	Kappa Alpha Theta
[5]¶Fisher, Raymond Henry	Palo Alto	Engl. 19·156+59	202 Pope, P-p
[1]Fisher, Richard Allen	Stanford Univ.	Econ. 84·55–15	543 Encina-*1795*
Fisher, Robert Light	Bellingham, Wash.	Educ. 85·49+56	308 Encina-*2337*
[12]Fiske, James Brooks	Triunfo	LD 38+24	32 Encina-*2271*
Fitting, Ralph U., Jr.	Los Angeles	LD 47+45	15 Encina
[12]Fitz, Kathleen Adkisson A.B., Stanford, 1929	Los Angeles	Engl.-P.Sp.9·173+177	Al.Phi-*1387*
Fitzpatrick, Thomas Harold A.B., Michigan, 1928	San Diego	Law gr.	539 Lasuen-*1365*
Fixott, Richard Scott	Portland, Ore.	LD 98+85	Delta Chi-*1304*
Fleck, Herman Stanley	Santa Monica	LD 44–11	21 Encina-*652*
[1]Fleishhacker, Herbert, Jr.	Menlo Park	Soc.S.-Jn. 128+21	Kingscote-*1744*
Fleming, Bruce Lundie	Maui, T.H.	LD 46+16	449 Encina-*1562*
[1]Fleming, Frank Newman	Santa Monica	LD 90+93	200 Coleridge, P-p
[5]Fleming, James Foss	Maui, T.H.	Pre-Med.5·123+26	204Toyon-*1562*
Fleming, Jessie Edrie	Sanger	Engl. 15·139+171	247 Roble-*1996*

[4]Fleming, Paul	San Mateo	LD ‡	120 Toyon-*1797*
[28]Fletcher, Ferdinand Thumb	San Diego	LD 27+14	107 Encina-*2612*
Fletcher, Lawrence Salmons A.B., Stanford, 1928	San Diego	Law gr.	346 Madroño, P-p
Fletcher, W. Donald	Vancouver, Wash.	Econ. 97·42+25	Delta Chi-*1304*
Flickinger, Don Davis A.B., Stanford, 1929	Long Beach	Pre-Clin. 186+76	1001 R'm'a, P-p
[4]Flint, Calvin Charlie A.B., Stanford, 1928	Long Beach	Hist. gr.	305 Union-*611*
Flint, Morton Mitchell A.B., Stanford, 1929	Hollister	C.E. 186+137	222 Toyon-*2586*
Flohr, Edward M. A.B., Stanford, 1929	Wallace, Idaho	Econ. 184+175	Phi Sigma Kp.-*538*
Flood, H. Lee	Ponca City, Okla.	S.Engr. 139+15	12 Union-*2502*
Fogg, Edward Park	South Pasadena	Econ. 93·48+20	108 Sequoia-*2623*
[4]Foley, Helen Mary Ph.B., Loyola, 1924; A.M., Stanford, 1927	Menlo Park	Cl.Lit.gr.	Col.SacredH'rt,MP-mp
[4]Foley, Mary A.B., College of the Sacred Heart, 1922; A.M., Stanford, 1925	Menlo Park	Cl.Lit.gr.	Col.SacredH'rt,MP-mp
Fonda, Charles P.	Inglewood	Psych.149+79	Sigma Al.Eps.-*1305*
Fong, Edward W. A.B., Stanford, 1929	China	S.Engr.100·91+10	ChineseClub-*11*
[12]Foote, Lucius Ketchum A.B., Stanford, 1926	Palo Alto	Law gr.	643 High, P-p
[12]Foote, Wentworth Butler	Los Angeles	LD 12+6	115 Encina-*1182*
[23]Forbes, Elizabeth	San Francisco	LD 31+29	172 Roble-*2523*
Forbes, Robert Parsons	San Francisco	LD 57+22	Alpha Tau Omega
[5]Force, George H.	Piedmont	Econ. 167+56	Phi Gamma Delta
Ford, Betty A.B., Stanford, 1929	San Francisco	Engl. 10·170+151	436 Wvly.,P-*945*
[4]Fordice, Frederick Leland A.B., Wabash, 1909, A.M., 1910	Edmond,Okla.	Educ. gr.	314 Toyon
Forker, Paul Welch A.B., Stanford, 1928	Los Angeles	Law gr.	312 Union-*1067*
Forney, George Henry	Parsons, Kans.	LD 44–11	448 Encina-*2495*
§Forrester, Miriam Kathleen A.B., Oregon, 1927; A.M., Stanford, 1928	Palo Alto	Engl. gr.	1127 High, P-p
Forster, Albert Edward	Los Angeles	Hist. 163+173	Zeta Psi-*B*
[5]Fort, William A.	Los Angeles	Econ. 162+90	Phi Gamma Delta
Foss, John Harrison, Jr.	Maui, T.H.	LD 43+43	449 Encina-*726*
Foster, Frances A.B., Stanford, 1925	Stanford Univ.	Med. gr.	3064 Sacramento, SF-sf
[134]Foster, Henry Albert A.B., Yale, 1907; A.M., Chicago, 1912	Maryville, Mo.	Soc.S. gr.	252 Everett, P-p
Fouch, Florence Louisa A.B., Stanford, 1928	Maxwell	Med. gr.	805 Leavenworth, SF-sf
[2]Foulke, Edson L.	Yreka	Econ. 175+23	481 Lytton, P-*2757*
Foultz, F. Ward	Glendale	Engl. 90·48+60	211 Branner-*1854*
Fowle, John Miller	Los Altos	S.Engr. 30·126+104	Los Altos-la
[12]Fowler, Lorne Eugene	Rialto	Chem. 90·60+48	139 Branner
[5]Fowler, Wynette Lorene A.B., Stanford, 1929	San Jose	Math. gr.	346 Roble-*1105*
[5]Fox, Alfred Lewis	Los Angeles	Pre-Med. 28·82+69	229 Brnr.-*2792*
Fox, Charles Marvin	San Diego	Pol.S. 134+73	Zeta Psi-*B*
[4]Fox, Clement S. A.B., Minnesota, 1916	Gilbert, Ariz.	Educ. gr.	656 Channing, P-p

§ Deceased, April 10, 1929.

[4]Fox, Denis Llewellyn A.B., California, 1925	Mayfield	S.Biol. gr.	544 Bowdoin, M
Fox, D. Scott B.S., Cornell, 1913, Ph.D., 1919	Berkeley	Med. gr.	2247 College, B-b
Fox, Norman Clay	Cottonwood	LD 59+31	225 Encina-*2422*
Fox, Stark A.B., Stanford, 1929	Los Angeles	Pol.S. 184+106	Al.Tau Om.-*1384*
Foxworthy, Herbert Leslie A.B., Stanford, 1929	Hollywood	Engl.-P.Sp.183+220	256Tyn.-*1033*
[1]Foyer, Donald Renouf	Culver City	LD 13+3	*326* Encina
Frame, Hermet Melven	Selma	LD 44–6	43 Encina
Francis, Cyril Chalmers A.B., Stanford, 1928	Los Angeles	Med. gr.	2321 Sacramento, SF-sf
Francis, Lionel	New Bedford, Mass.	Pre-Med.135·30–19	821 Wav., P-p
[4]Francis, Loie Gertrude	Ferndale	Educ. ‡	536 Alvarado
Franck, Fred Christian	Santa Clara	S.Engr.90·98–4	1179Wash.,SC-sc
[12]Franich, Martin John A.B., Stanford, 1929	Watsonville	Econ. 15·173+267	302 Toyon-*2281*
Frank, James Eugene A.B., Stanford, 1929	San Francisco	Econ. 5·175+38	301 Toyon-*3014*
Frankel, Martin	San Jose	Econ. 43·92+4	123 Toyon-*2126*
[12]Frankel, Philip A.	Los Angeles	Hist. 98–16	943 Bryant, P
Franklin, John Patterson A.B., Stanford, 1928	Palo Alto	S.Bus. gr.	130 Fulton, P-p
Franklin, Ray A.B., Stanford, 1928, A.M., 1929	Durham	Educ. gr.	786 Palo Alto, P-p
[4]Fraser, George Frederick	Antioch	LD	106 Encina
[4]Fraser, Robert M. A.B., Stanford, 1927	Los Angeles	Span. gr.	256 Toyon-*932*
[4]Fraser, William M. Ed.B., Washington, 1922	Port Angeles, Wash.	Educ. gr.	431 Lytton, P-p
[14]Frazier, Alfred Egelmann A.B., Stanford, 1928	Berkeley	Law gr.	503 Encina-*1542*
Frazier, Wallace Emile A.B., Stanford, 1929	Portland, Ore.	Hist. 5·183+150	308 Branner-*1246*
Fredericks, James Blakeley	Los Angeles	LD 94+15	Delta Upsilon
[123]Frederickson, Robert Lee A.B., Stanford, 1929	San Francisco	Law gr.	333 Waverley, P
[12]Freedman, Marvin Alvin	Los Angeles	LD 36·35+14	204 Encina-*2751*
[4]Freeman, Chris	St.Louis, Mo.	Econ. 42·141+27	257 Toyon
[1]Freeman, F. Kemper	Bellevue, Wash.	LD 59–19	Theta Chi-*1383*
Freeman, Jacob George A.B., California at Los Angeles, 1927	Los Angeles	S.Bus. gr.	329 Hawthorne, P-p
Freeman, Robert Lee	San Francisco	LD 77+86	121 Toyon-*2668*
Freeman, William Bogle	Bellevue, Wash.	Econ. 117+103	Theta Chi-*1383*
Freibrun, Jacob Louis A.B., California at Los Angeles, 1928	Los Angeles	Med. gr.	349 Hamilton, P-p
French, Andrews Carroll A.B., Stanford, 1929	Sacramento	Engl. 49·134+66	Kingscote
French, Richard Louis	Los Angeles	LD 124+94	Delta Tau Del.-*1363*
French, Walter Gordon A.B., Stanford, 1929	Hollywood	Econ. 181+85	*220* Toyon-*2668*
French, William Massey	San Diego	LD 45+35	350 Encina-*2336*
Frentrup, R. Lud	Berkeley	Econ.132+41	Delta Kappa Epsilon
[12]Freudenberg, Horst E.	Weinheim, Ger.	Engl. 90·28+12	508 Encina
Frey, Richard Clark A.B., Stanford, 1929	Palo Alto	S.Engr. 184+186	*260* Portola, P-p

Frick, Anne Dudley — Woodside — LD 83+56 — Kappa Alpha Theta
[1,2,4]¶Frick, Barbara — Woodside — Educ. 155+214 — Woodside-*1708*
[1]Frick, Madeline — Woodside — Psych. gr. — Portola Rd., Wds.-*1708*
A.B., Stanford, 1928
[4]Friede, George W. — Portland, Ore. — Law gr. — 249 Toyon-*1183*
A.B., Dartmouth, 1927
Friend, Maurice Robert — Los Angeles — Phyl. 23·110+165 — 229 Branner-*738*
Friendlich, Richard Joseph — San Francisco — LD 56+61 — 112 Encina
Frisbee, Lynn Buck — San Francisco — Econ. 5·151+50 — 215 Branner-*513*
Frohlich, Irving Albert — San Francisco — Econ. 21·146+2 — 692 Mirada-*1916*
Frost, Benjamin Burt — Los Angeles — S.Engr. 147+95 — Al.Tau Om.-*1384*
Frost, Daniel James — Stanford Univ. — Geol. 185+1 — Phi Delta Theta
A.B., Stanford, 1929
[1,2]Frudenthal, Walter Joseph — Piedmont — S.Bus. gr. — 27 Encina Ave., P-p
B.S., California, 1927
Frugé, AugustKirkpatrick — TheDalles,Ore. — LD 45+53 — 207 Encina-*2676*
[4]Fry, Howard Wells — Navarro — Educ. gr. — 712 Bryant, P-p
A.B., San Jose State Teachers College, 1926
[4]Fry, Hubert Otis — Huntington Park — LD — 229 Union
Fry, Leland Ray — Saratoga — LD 93–4 — 307 Union
Fry, Marietta — Palo Alto — Law gr. — Kappa Kappa Gamma
A.B., Stanford, 1928
[3]Fry, Mary Isabel — Los Angeles — Engl. gr. — 205 Roble-*2183*
A.B., California at Los Angeles, 1928
Frye, Vernol Julian — San Jose — Chem. gr. — 835 S. 2d, SJ-sj
A.B., San Jose State Teachers College, 1928
Fryer, Gaillard — Santa Barbara — Econ. 90·41+17 — 106 Sequoia-*1017*
[1]Fudge, Harold Lewis — Crown Point, Ind. — Min. gr. — 1680 Cambridge, M-*2663*
Graduate, U.S. Naval Academy, 1922
Fuhriman, David H. — Providence, Utah — S.Bus. gr. — 171 Everett, P-p
B.S., Utah Agricultural, 1926; M.B.A., Stanford, 1929
Fulkerson, C. Ronald — Ukiah — LD 48+45 — 407 Encina-*1933*
Fuller, Douglas Raymond — Stockton — S.Bus. gr. — 546 Encina-*605*
A.B., Stanford, 1928
Fulton, Robert Avery — Corvallis, Ore. — Chem. gr. — 411 Kipling, P-p
B.S., Oregon State Agricultural, 1925
[2]Funabiki, Reiji — Mountain View — S.Engr.‡9–10 — Mt.View-Box 7,mv
Fung, Lung — Sebastopol — Pre-Med.90·45+59 — 925 Wav., P-p
Funk, Kenneth Boucher — Los Angeles — Econ. 180+84 — 217 Toyon-*930*
A.B., Stanford, 1929
[5]Furgason, Waldo H. — San Diego — S.Biol. gr. — 327 Waverley, P-*2493*
A.B., St. Olaf, 1924
[1]Gabbert, Howard Markland — Ventura — LD 50–11 — Delta Tau Delta
Gafford, James A., Jr. — Huntington Park — Med. gr. — 2173 California, SF-sf
A.B., Whittier, 1926
Gage, Margaret Esther — Palo Alto — LD 46+3 — 374 Roble-*2707*
Gage, Warren S. — Elk Grove — S.Engr.90·47+30 — 207 Sequoia-*1381*
¶Gagos, Hubert Kisag — San Francisco — Soc.S.-Jn. 146+145 — 215 Brnr.-*605*
Galarza, Ernest — Sacramento — Hist. gr. — 410 Lytton, P-*1211*
A.B., Occidental, 1927; A.M., Stanford, 1929
[4]Galbraith, C. Layton — McGill, Nev. — Educ. gr. — 329 Union
B.S., Utah Agricultural, 1928
Galbraith, Donald Bennet — Bakersfield — Pre-Med.111+12 — 249Branner-*2665*
Galbraith, Howard John — Bakersfield — S.Engr. 125+5 — 122 Toyon-*2665*
Gale, Hoyt Rodney — Eagle Rock — Geol. gr. — 214 Union-*83*
A.B., Harvard, 1926
Gallagher, HubertR. — Grand Junction,Colo. — Pol.S. 180+135 — 255 Everett, P-p
A.B., Stanford, 1929

Galliher, Edgar Wayne — Palo Alto — Geol. 196+174 — 925 Guinda, P-p
A.B., Stanford, 1929
[5]Galt, Ellis Cameron — Modesto — Soc.S.-Jn. 90·51+10 — 533 Encina
Gamble, Harry Paul — Compton — Econ. 96·50+42 — 900 Waverley, P-p
Gange, John Frederic — Palo Alto — LD 44+59 — 579 Everett, P-p
Gant, Hoyt Raymond — Modesto — Pre-Clin.98·89+24 — 204 Union-*2517*
A.B., Stanford, 1929
Gantner, John Oscar — San Francisco — LD 80+65 — Phi Gamma Delta
[5]Gardenier, William H. — San Francisco — LD 98+166 — Pacific Grove-pg
[1]Gardner, Thomas L. — Bakersfield — Span. 113+45 — 635 Bryant, P-p
[1]Garibaldi, James Donald — Merced — Pol.S. 187+141 — Phi Delta Theta
A.B., Stanford, 1929
[5]Garibotto, Merven John — Stockton — Pol.S. 141+11 — 311 Toyon-*2532*
[5]Garner, Leslie William — Baldwin Park — Econ. 175+0 — 248 Toyon-*2665*
[4]Garnjobst, Laura Flora — Salem, Ore. — Zoöl. gr, — Madroño-*1034*
B.S., Oregon State Agricultural, 1922; A.M., Stanford, 1927
[3]Garthwaite, John Gilbert — Stanford Univ. — Econ. 124–5 — Kappa Alpha
Gaspar, Jack McClain — San Francisco — LD 81–16 — 133 Toyon-*2313*
Gaspar, Louis A. R. — Honolulu, T.H. — Med.gr. 2180 Washington, SF-sf
A.B., Stanford, 1926
Gatch, Jeannetta Allen — Fresno — Engl.11·180+167 — 221 Roble-*2421*
A.B., Stanford, 1929
[4]Gatley, Miriam — Bakersfield — Engl. gr. — 284 Roble
B.S., Colorado Agricultural, 1922
[12]Gatzert, Alfred Conrad — Lodi — LD 48+61 — 114 Toyon-*1072*
Gausewitz, Alfred L. — Owatonna, Minn. — Law gr. — 1230 Parkinson, P-p
A.B., Minnesota, 1915, LL.B., 1917
Gaw, Emir Allen — Columbus, Ohio — LD 46+32 — 359 Encina-*666*
[1]Gaw, Murray Edward — Berkeley — Econ. 85·95+7 — 302 Union
A.B., Stanford, 1929
Gay, Thomas Robinson — Alhambra — LD 78–*2* — Theta Delta Chi-*929*
Gaynor, Edmund Patrick — Oakland — Pre-Med. 99·43+25 — 541 Enc.-*2105*
Geary, Harriet Agnes — Portland, Ore. — LD 92+64 — Alpha Phi-*1387*
[5]Gebhardt, Louis Philipp — Sacramento — Bact. 90·76+65 — 821 Waverley, P-p
[3]Geddes, William Stoddard — Sunnyvale — Educ. gr. — Sunnyvale-Box 492, s
B.S., Utah Agricultural, 1927
Gelmann, Herman Henry — Brooklyn, N.Y. — Chem. gr. — 426 Waverley, P-p
B.S., Fordham, 1928; A.M., Stanford, 1929
[4]George, Guy G. — Burlingame — Educ. gr. — 800 Winchester, B-b
B.S., Whitman, 1913
[4]George, Howard W. — Cloverdale — Educ. gr. — 309 Bryant, P-p
A.B., Willamette, 1923
Gerhart, Leo Ray — Tracy — LD 92+60 — 242 Branner-*2681*
[4]Gerlough, Emily Bjorneby — Mayfield — Psych. gr. — 540 Hanover, M-*35*
A.B., St. Olaf, 1914
[4]Gettys, Embry Martin — Decatur, Texas — Hist. gr. — 1680 College, M-*2251*
A.B., Baylor, 1914; A.M., Chicago, 1916
[12]Gettys, Plato Lee — Decatur, Texas — Pol.S. gr. — 684 Columbia, M-*2251*
A.B., Oklahoma, 1919, A.M., 1927
Gibbons, Henry, III — San Francisco — Med. gr. — 3491 Pacific, SF-sf
A.B., Stanford, 1927
[1]Gibbons, John Rodrick — Alturas — LD 0–17 — 406 Encina-*1423*
[27]Gibbons, M. Beulah — San Francisco — Ed.-G.A. 37·145+61 — Kp. Kp. Gam.
A.B., Stanford, 1929
Gibbs, Allison Johnson — Manila, P.I. — Law gr. — Delta Chi-*1414*
A.B., Stanford, 1928
Gibbs, Finley Johnson — Manila, P.I. — Soc.S. 143+257 — Delta Chi-*1414*

Giberson, Augustus Frederic Watsonville Pre-Clin.135·50+20 216 Un'n-*2017*
A.B., Stanford, 1929
[2,14]Giberson, Merrill Bennett Richmond Engl.-P.Sp.165+19 135Toy'n-*1491*
Giberson, Ralph Harold Richmond LD 44+17 226 Encina-*1491*
Gibson, Beverly Clay Sacramento Econ.-Acct.90·92+30 314Seq.-*2825*
A.B., Stanford, 1929
Gibson, Mary Constance Palo Alto LD 22·43+19 804 Forest, P-p
Gibson, Ora James San Francisco S.Biol.gr. 3701 Divisadero, SF-sf
A.B., Stanford, 1929
Gibson, Thomas Benton, Jr. Wilmette, Ill. Geol. 195+74 Chi Psi-*1648*
A.B., Stanford, 1929
[3]Gibson, William Roland Los Angeles Med. gr. 336 Emerson, P-p
A.B., California at Los Angeles, 1928
Giesecke, Ernest Marble Falls, Texas LD 86+67 Sigma Nu-*1385*
[2]Giffen, Frances R. Fowler Econ. 70·91+154 271 Roble-*1573*
Giffen, Hilliard Roy Fowler Econ.-Acct.180+265 213Bnr.-*2668*
A.B., Stanford, 1929
Gilbert, Gordon Lorenzo Stanford Univ. Phil. 96+55 Sigma Nu-*1385*
[12]Gilbert, Walter Eugene Los Angeles Law 99·91+17 1212 Parkinson, P
A.B., Stanford, 1929
Gilbert, William Isaac, Jr. Los Angeles Law gr. 585 Salvatierra
A.B., Stanford, 1928
Gilbreath, Robert Irvin Monte Vista,Colo. LD 91+15 Alpha Tau Omega
Gildersleeve, John S. Fort Bragg LD 42–8 110 Encina-*1502*
Gilkey, Wallace Alfred Palo Alto Chem. gr. 1027 Bryant, P-p
A.B., Stanford, 1922, Engineer, 1923, Ph.D., 1929
[5]Gillespie, John Wynn Albany, Ga. Bot. gr. 510 Encina
B.S., Georgia, 1923; A.M., Stanford, 1926
Gillespie, Lucy Frain Edwardsville, Ill. Econ. 90·44+18 115 Roble-*1652*
Gillett, Raymond Earl Hoquiam, Wash. LD 83+30 Pacific Grove-pg
Gillig, Gladys San Francisco LD 87+120 Kappa Kappa Gamma
[23]Gillingham, John Rowley, Jr. Berkeley LD 14–9 402 Encina-*982*
[4]Gilman, Charles Edward Berkeley LD ‡ 228 Union-*1011*
[1,14]Gilman, John Cary San Francisco Econ. 122+7 Theta Xi
[1,14]Gilman,Philip Kingsnorth SanFrancisco LD 89+15 Pacific Grove-pg
[4]Gilmer, Mary Gertrude Seattle, Wash. Cl.Lit. gr. Madroño-*814*
A.B., Washington, 1929
Gilmour, Craddock M. Price, Utah Econ. 144+1 Sig. Al. Epsilon-*1305*
[5]Girvetz, Harry Kenneth Pasadena LD 82+15 131 Toyon-*1564*
[2]Girzi, Edward Ernest San Francisco LD 28+28 235 Encina
Gist, Adèle Gilman San Diego Soc.S. 6·135+217 Al. Omi. Pi-*1367*
Gist, Fred Lincoln San Luis Obispo LD 90+9 140 Branner-*1855*
Gittins, George William Hollywood Educ. gr. 718 Bryant, P-Bx 373, p
Ed.B., California at Los Angeles, 1928; A.M., Stanford, 1929
[2]Givan, Charles Vernon Sacramento C.E. gr. Stanford Univ.-*2654*
A.B., Stanford, 1925
Givan, Mary Alverna Sacramento Fr. 90·44+38 224 Roble-*2654*
[1]Givens, John Alfred Portland, Ore. Econ. 97+1 212 Sequoia-*933*
[5]Glen, William A. Rock Springs, Wyo. Law gr. 211 Sequoia-*1242*
A.B., Stanford, 1927
[12]Glenn, Margaret Elizabeth Los Angeles Hist. 94·89+76 Chi Omega
A.B., Stanford, 1929
[4]Gliddon, William James San Francisco LD ‡ 109 Encina
Glinz, Leslie Albert Oak River, Manitoba Educ. gr. 721 Columbia, M-m
A.M., Columbia, 1923
[4]Glover, Helen Luciel Ord, Neb. Math. gr. 613 Salvatierra
A.B., Nebraska, 1922

Goddard, Genevieve — Modesto — LD 45+69 — 154 Roble-*2186*
Godett, Michael Robert — Los Angeles — Med. gr. 2180 Washington, SF-sf
A.B., Occidental, 1927
Godsol, Major Bryant — Los Angeles — Econ. 180+88 — 358 Encina-*2395*
A.B., Stanford, 1929
[4]Goelz, Howard Fenner — Sonora — LD ‡ — Toyon-*1029*
[4]Goldeen, Hazel Zerline — San Jose — Educ. gr. — 1611 Alameda, SJ-sj
A.B., San Jose State Teachers College, 1928
[5]Goldie, Edward James — San Francisco — Pol.S. 120+36 — Kappa Alpha
Goldsmith, Egbert Erion — Sacramento — LD 91+50 — 250 Toyon-*2668*
[24]Goldsmith, Meta Marion — OregonCity, Ore. — Span. gr. — 340 S. 16th, SJ-sj
A.B., Oregon, 1914
[1]Golsan, Charles Edouard — Paris, France — S.Engr.90·15–14 — 421 ElEcrdo-*1877*
[14]Good, Roy — Fort Bragg — Educ. sp. 33+43 — 119 Web'r, RC-rc
Goodall, William Archie — Long Beach — LD 88–1 — Phi Sigma Kappa-*538*
Goodcell, Ross Adams — Los Angeles — Phyl. 180+50 — 532 Univ., P-p
A.B., Stanford, 1929
[4]Goode, Louise Hostetler — Mesa, Ariz. — Educ. gr. — 520 Cowper, P-p
Ph.B., Chicago, 1921
[12]Goodell, Fred Oliver — Isleton — LD 54–10 — 349 Hamilton, P-p
Gooden, Reginald Heber — Los Angeles — LD 85+31 — 250 Branner-*2059*
Gooden, Robert Burton, Jr. — Los Angeles — Soc.S. 185+68 — 132 Branner-*2059*
A.B., Stanford, 1929
[2]Goodloe, David Short — Hollywood — LD 15·4–16 — 112 Encina-*694*
[4]Goodman, Edward — Phoenix, Ariz. — Soc.S.gr. — 426 Waverley, P-p
A.B., Redlands, 1929
Goodspeed, Barton Alan — Miami, Fla. — LD 95+18 — Sigma Nu-*1385*
[5]Goodwin, Ewart Wade — San Diego — Econ. 160+32 — Zeta Psi-*B*
[4]Goold, John Vernon — Centerville — Educ. gr. — Centerville-Box 230, c
A.B., Stanford, 1920
[2]Gordon, Artha Dorice — Redwood City — Math. 90·16+19 — RC-Box 52, rc
Gordon, Charles Taylor — Connersville, Ind. — S.Engr. 88·48–15 — 650 Wav'ley, P-p
Gordon, Frank Landsdell — San Francisco — Econ. 90·47–10 — 429 Encina
Gordon, Joseph Harold, Jr. — Tacoma, Wn. — LD 96+87 — 114 Toyon-*1028*
Gordon, Robert Dean — San Carlos — LD 85+99 — 215 Sequoia-*1178*
Gorham, Charles Henry — Morris, Ill. — LD 100+29 — Delta Tau Delta-*1363*
[3]Gorham, Henry Douglas — Emerald Lake — Econ.131–10 — Emerald Lake, RC-rc
Goudy, Elmer Raymond — Portland, Ore. — Law gr. — 549 Stanford-*2616*
B.S., Oregon State Agricultural, 1924; LL.B., Stanford, 1929
[5]Gould, Francis Burnell — Oakland — LD 73+31 — 537 Encina-*1855*
Grace, Henry P. — San Francisco — LD 45+35 — 334 Encina-*2047*
Grace, William H. — Mount Vernon, Wash. — LD 90+47 — Theta Xi
Graff, Frederic Easton — Pasadena — Econ.180+20 — 557 Hamilton, P-*1546*
A.B., Stanford, 1929
[1]Graham, Wm. M., Jr. — Bloomington, Ind. — S.Bus. gr. — Kingscote
B.S., Indiana, 1928
[27]Graham, William Rabe — Pasadena — LD 28+6 — 424 Encina-*1931*
Grannis, Marcella Hazel — Burlingame — Fr. 90·49+64 — 259 Roble-*2152*
[12]Grant, Joseph Foster, Jr. — San Diego — LD 6·62–5 — 137 Toyon-*543*
Grant, Richard Angus — Los Angeles — LD 92+29 — Delta Kappa Epsilon
Grant, Russell Vantile — San Diego — Pre-Med. 90·47+36 — Pac. Grove-pg
Grant, Sarah Allis — San Diego — LD 94+59 — 367 Roble-*543*
[2]Grant, Ulysses S., IV — Burlingame — Geol. gr. — 1480 Highway, B-*1050*
A.B., Harvard, 1915
[4]Gratz, Eleanor Victoria — San Jose — Educ. gr. — 1136 Curtis, SJ-sj
A.B., Stanford, 1921

Graun, Richard Ernest — Berkeley — Med. gr. — 129 Emerson, P-p
A.B., California, 1923

[4]Gravestock, Warren Edward — Palo Alto — Educ. gr. — 306 Union
A.B., Stanford, 1923

Gray, Carol Ross — Los Altos — Hist. 191+183 — Kappa Alpha Theta
A.B., Stanford, 1929

Gray, Dorothy Sewell — Stanford Univ. — Engl. 188+29 — Madroño
A.B., Stanford, 1929

[12]Gray, Leynord Ranny — New York, N.Y. — LD sp. 39–9 — Ram'na Hotel,P-*1096*

[4]Gray, Nelson — Upland — LD — 325 Union-*634*

[1]Gray, Stewart — Benicia — S.Engr. 196+49 — 320 Sequoia-*1080*
A.B., Stanford, 1929

[12]Gray, Sydney MacLean — Stanford Univ. — Pol.S. 180+23 — Kingscote
A.B., Stanford, 1929

[2][4]Green, David Ely — Berkeley — Min. gr. — 654 Cabrillo-*1882*
A.B., Harvard, 1927

Green, Marion Melvin — Reno, Nev. — Pre-Clin.135·50+9 — 216 Union-*2394*
A.B., Stanford, 1929

Green, Oscar Fredric — Palo Alto — Phil. gr. — 555 Waverley,P-Bx322,p
A.B., Rice Institute, 1916; A.M., Stanford, 1927

Green, Paul Jones — Inglewood — Econ.108·42–15 — BetaThetaPi-*1335*

[4]Greene, Amsel — Juliaetta, Idaho — Cl.Lit. gr. — 211 Roble-*879*
A.B., Idaho, 1916

[4]Greene, Earnest S. — San Jose — Chem. gr. — 705 S. 8th, SJ-sj
A.B., San Jose State Teachers College, 1927

Greene, Nelle Dorris — Phoenix, Ariz. — LD 91+50 — Delta Delta Delta-*1893*

Greene, Preston — Sacramento — Soc.S. 90·38–7 — Alpha Kp. Lm.-*658*

Greene, William Sumner — Pasadena — Engl.-P.Sp.134+135 — PhiSg.K.-*538*

Greene, William Wallace — Phoenix, Ariz. — Pre-Cl.100·96+60 — 475Frst.,P-*1893*
A.B., Stanford, 1929

Greenfield, Charles Edward, Jr. — Ross — Soc.S. 132+46 — Delta Upsilon

[4]Greenleaf, Charles Ravenscroft — San Jose — Educ. gr. — 498 S. 12th, SJ-sj
A.B., San Jose State Teachers College, 1927

[4]Greenleaf, Margaret Page — San Jose — Educ. gr. — 498 S. 12th, SJ-sj
A.B., Mills, 1929

[4]Greenleaf, Mary Page — San Jose — Educ. gr. — 498 S. 12th, SJ-sj
A.B., San Jose State Teachers College, 1925

Greer, David McKay — Bentonville, Ark. — S.Engr.99·87+109 — 535 Encina-*2402*
A.B., Stanford, 1929

Gregg, Douglas Clark — Pasadena — Pol.S. 136+79 — Alpha Delta Phi-*J*

[13]Grelle, James Henry — Portland, Ore. — LD 59+10 — Phi Kappa Sigma

Greninger, Alden B. — Potrerillos, Chile — Min. gr. — 312 Sequoia-*860*
A.B., Stanford, 1929

[5]Grey, Elaine Alethea — Alameda — Hist. gr. — 217 Roble-*2125*
A.B., Stanford, 1929

Grey, George Cunningham — Glendale — LD 43+46 — 359 Encina-*2285*

[1]Gribbin, George Homer — Nashville, Mich. — Engl. 110·70+117 — 527 Encina-*2581*
A.B., Stanford, 1929

[34]Griesinger, Philip — Wilson Creek, Wash. — Econ. gr. — 553 Salvatierra-*2024*
B.S., State College of Washington, 1919; M.B.A., University of Washington, 1929

[3]Griffith, Edgar Gordon — Pasadena — LD 37–5 — Alpha Delta Phi

[1]Griffith, Frances Harriet — Tacoma, Wash. — LD 0–15 — 220 Roble-*2465*

[4]Griffith, John Hughes — Taft — Chem. gr. — 846 Middlefield, P-p
A.B., Miami, 1921; A.M., Ohio, 1922

[4]Griffith, Mary Alice — Taft — Educ. gr. — 846 Middlefield, P-p
A.B., New Mexico State Teachers College, 1925; A.M., Stanford, 1928

[4]Griffiths, John Francis — Los Angeles — Span. gr. — 535 Fulton, P-p
A.B., Kansas, 1924, A.M., 1925

[4]Griffiths, Mary Eleanor — Napa — Ed.-G.A. 67·59+39 — 539 Lasuen
Griggs, Paul Clayton — Long Beach — LD 45+24 — 316 Encina-*637*
Grimm, Thomas Henry — Reno, Nev. — Pol.S. 95·86+43 — 221 Toyon-*2757*
A.B., Stanford, 1929
[4]Grimmer, Charles Fred — Santa Clara — Educ. gr. — SC-Box 26, Rt. A, sc
A.B., San Jose State Teachers College, 1927
Griset, R. Ray — Santa Ana — Hist. 87·93+7 — 102 Sequoia-*1250*
A.B., Stanford, 1929
[1]Grupcheff, Peter Pericli — Los Angeles — Pre-Med.‡1–10 — 114University,P-p
Guard, Edmond Charles — Santa Ana — LD 45+56 — 117 Encina-*1677*
¶Guggenhime, Richard E. — San Francisco — Pol.S.5·179+286 — 128Branner-*1624*
A.B., Stanford, 1929
Gundry, Francis Joseph — Bakersfield — LD 69+6 — Sigma Nu-*1385*
Gunn, Robert Mackelcan — Sausalito — Econ. 183+0 — Phi Kappa Sigma
A.B., Stanford, 1929
[23]Gunnerson, William Fulton — Elsinore — Econ. 22·101+42 — 235 Branner
Gunsolus, Mate — Palo Alto — Engl. 152+240 — 455 Forest, P-p
Hables, Alvin Adolph — King City — LD 43+11 — 22 Encina-*145*
[4]Hables, Leslie Irvin — King City — LD 0–13 — 248 Toyon-*2668*
[234]Hackendorf, MaryElizabeth — Tulsa, Okla. — Educ. gr. — Madroño
A.B., Stanford, 1927, A.M., 1928
[2]14]Hackler, John Fielden — Tahlequah, Okla. — Chem.135·34+24 — 815Stnfd.,M-*1654*
[2]14]Hackler, John Monroe — Tahlequah, Okla. — Educ. gr. — 815 Stanford, M-*1654*
Ph.B., Chicago, 1916, A.M., 1921
Hackney, A. Wayne — Pasadena — Phys. 90·46+13 — 219 Sequoia-*1871*
[4]Haddock, Nellie P. — Norwalk — Educ. gr. — 325 Roble
B.S., Columbia, 1921, A.M., 1926
Hadenfeldt, Charles T. — Piedmont — LD 88–7 — Phi Delta Theta
Hadley, Clausin Dennis — Santa Rosa — S.Bus. gr. — 505 Prnctn,M-Bx704,m
B.S., Oregon, 1928
Hadley, Russell Curtis — San Mateo — LD 45+34 — 303 Encina-*2101*
[4]Haeske Carroll M. — Bellingham, Wash. — Engl. gr. — 223 Union
A.B., Washington, 1924
[4]Hagan, Edith Grace — Sierra Madre — Educ. gr. — 173 Roble-*652*
A.B., Syracuse, 1914
[34]Hagan, Harold Raymond — Palo Alto — Zoöl. gr. — 1095 Ashby, P-p
B.S., Utah Agricultural, 1914
[14]Haight, Henry Huntly — Stockton — LD 0–27 — Sigma Chi-*628*
[4]Haight, Rex C. — Grass Range, Mont. — Econ. gr. — 360 Bryant Ct., P-p
A.B., Iowa State Teachers College, 1916
[4]Halbert, Elizabeth Ann — Fresno — Educ. gr. — 167 Roble
A.B., Stanford, 1924
[5]Halderman, Helen Harriet — San Francisco — Psych. 89+64 — Pi Beta Phi-*1918*
Hale, Prentis Cobb, Jr. — San Francisco — LD 31–6 — 232 Encina
Haley, William Harrison, Jr. — Fresno — E.E. gr. — 308 Sequoia
A.B., Stanford, 1928, Engineer, 1929
[4]Hall, Alton L. — Bishop — S.Biol. gr. — 1360 College, M-*1245*
A.B., Colgate, 1902
Hall, Arthur Curtis — El Paso, Texas — S.Engr. 120·38–5 — 432 Encina-*675*
[12]Hall, Carolyn — San Francisco — LD 30+8 — 172 Roble-*1248*
[4]Hall, Cecile Belknap — Los Gatos — Educ. gr. — Los Gatos-Box 358, lg
A.B., Stanford, 1928
Hall, Gordon, Jr. — Berkeley — Law gr. — Phi Gamma Delta
A.B., Stanford, 1928
Hall, James Kendall — Stanford Univ. — Econ. gr. — 445 El Escarpado-*55*
A.B., Oregon, 1926, A.M., 1926; Ph.D., Stanford, 1929
Hall, John — Palo Alto — S.Bus. gr. — 1227 Byron, P-p
A.B., Stanford, 1925

[1]Hall, Joseph Sargent — Los Angeles — Cl.Lit. gr. — 531 Cowper, P-*1665*
A.B., Stanford, 1928
Hall, Lawrence Belknap — Los Gatos — Hist. 158+63 — Delta Chi-*1304*
[2,5]Hall, Lieuallen J. — Healdsburg — LD 57+38 — 205 Emerson, P-p
Hall, Marshall Spencer — San Jose — Hist.23·94+43 — 1694Alameda,SJ-sj
Hall, Nason Eustace — Long Beach — Econ. 146+54 — Kappa Alpha
[12]Hall, Norma Wright — Los Angeles — Econ. 30·168+42 — 1227 Byron, P-p
[4]Haller, Sarah Charlotte — Admire, Kans. — Educ. gr. — 583 Lagunita-*1918*
B.S., Kansas State Teachers College, 1926
[4]Halley, Esper Edward — Fairview, Okla. — Educ. gr. — 275 Fernando, P-p
B.S., Northwestern State Teachers College, 1922
Halley, James Woods — Rapid City, S.D. — S.Engr.50·135+47 — 316 Union-*1692*
A.B., Stanford, 1929
[4]Halpain, Mary Emma — Pittsburg, Kans. — Educ. gr. — 166 Roble-*2467*
B.S., Kansas State Teachers College, 1926
Halpern, Gilbert M. — Honolulu, T.H. — LD 84+17 — 13 Toyon-*1019*
Halsted, A. Stevens, Jr. — Pasadena — Soc.S. 187+236 — 237 Toyon-*82*
A.B., Stanford, 1929
[12]Halsted, Eminel Potter — San Francisco — Hist. 140+25 — Kappa Sigma-*1326*
Haman, John O. — San Francisco — Pre-Clin.28·160+105 — 1140Brnt,P-p
A.B., Stanford, 1929
Hamblin, Donald William — Pasadena — Pol.S. 184+228 — Phi Kappa Sigma
A.B., Stanford, 1929
[3]Hamelin, Douglas F. — La Fleche, Sask. — Geol. gr. — 228 Union-Box 903, p
A.B., California at Los Angeles, 1928
Hamilton, Albert Edward — Bloomington — S.Engr. 46·93+52 — 113 Toyon-*1741*
[5]Hamilton, Fay Dunn — Tulsa, Okla. — Hist. gr. — 739 Santa Ynez-*1366*
A.B., Stanford, 1928
Hamilton, Frederick Gordon — Oakland — LD 36·59+11 — 251 Encina
[12]Hamilton, Howard — Crescent City — LD sp. 6–23 — 427 Embar'ro, P-*132*
Hamilton, Jeanette — Oakland — Pol.S. 78·42–14 — Del.Del.Del.-*1325*
Hamilton, Luke Munro — Oakland — Med. gr. — 2295 California, SF-sf
A.B., California, 1925
[2,4]Hamilton, Van Rensselaer — Los Angeles — S.Biol. 96·75–5 — 562 Encina-*737*
[5]Hamlin, John Hackney — Pasadena — Phil. 163+180 — 121 Wilson, P-p
[5]Hamlyn, John Joseph, Jr. — San Francisoc — Law gr. — 524 Encina-*2117*
A.B., Stanford, 1928
[4]Hamm, Mary Alice — San Jose — Engl. gr. — 320 N. 17th, SJ-sj
A.B., Oregon, 1921
Hamman, Charles Leroy — Oakland — LD 93+119 — 126 Branner-*2109*
Hammond, Darvel T. — Providence, Utah — S.Bus. gr. — 171 Everett, P-p
B.S., Utah Agricultural, 1928
[5]Hammond, George Brown — Stockton — Econ. 84+1 — Sigma Nu-*1385*
Hammons, Hal Valentine — Ventura — LD 43+29 — 125 Encina-*2563*
[4]Hampton, Gerald Paul — San Francisco — LD ‡ — Toyon
[4]Handy, B. Marjorie — Berkeley — Econ. gr. — 583 Lagunita-*531*
A.B., California, 1927
Hand, Milton Norval — San Diego — Educ. 90·40+6 — 402 Sequoia-*1891*
[4]Hannah, Elizabeth Verna — Sacramento — Educ. gr. — 108 Roble
A.B., College of the Pacific, 1927
[12]Hanford, Eleanor S. — Middletown, N.Y. — Econ. gr. — Menlo Heights-*1646*
A.B., Vassar, 1928; A.M., Stanford, 1929
[12]Hanify, Francis Ryder — San Francisco — Econ. 180+120 — Phi Kappa Psi
A.B., Stanford, 1929
Hanna, Henry Charles, Jr. — El Segundo — Econ. 109–4 — Zeta Psi-*B*
[12]Hanna, John Muir — Martinez — LD 19–21 — 118 Encina-*2797*
Hanna, Richard Rea — Martinez — LD 53+31 — 125 Encina-*2797*

[1]Hanna, Strentzel	Martinez	LD 38–42	720 Cowper, P-p
[4]Hanner, John Flint	Fresno	Educ. gr.	650 San Juan-*1363*
A.B., Chicago, 1922			
[4]Hanscom, William W., Jr.	San Francisco	LD 43–11	120 Toyon-*1877*
[5]Hansen, William Webster	Fresno	Phys. gr.	430 Encina-*1272*
A.B., Stanford, 1929			
[5]Hanson, Clarence Morgan	Ceres	Econ.90·76+43	557 Hmlton,P-*1456*
[1]Harbison, Robert Lezotte	SanBernardino	Soc.S.-Jn. 180+83	Theta Chi-*1383*
A.B., Stanford, 1929			
Harcourt, Shirley	Palo Alto	LD 44+38	157 Roble-*91*
[5]Harder, Theo	Bakersfield	Pol.S. gr.	258 Toyon-*2043*
A.B., Stanford, 1929			
Hardison, Robert Allen	Santa Paula	Econ.28·165+140	239Branner-*1268*
A.B., Stanford, 1929			
[4]Hardman, Maud R.	Salt Lake City, Utah	Ed.-G.A. gr.	335 Tennyson, P-p
A.B., Utah, 1924			
Hardy, Arthur Gustave	Oakland	LD 83+29	Kappa Sigma-*1326*
[1]Hardy, Jack Wagner	Los Angeles	Law gr.	443 Kipling, P-*5*
A.B., Stanford, 1926, J.D., 1929			
[4]Harford, Crystal	Berkeley	Germ. gr.	265 Roble
B.L., California, 1908			
Hargrave, Thomas C.	Medicine Hat, Alta.	Engl. gr.	211 Union-*2752*
A.B., Alberta, 1926			
[5]Harkleroad, Dudley Henry	Fresno	Law gr.	231 Union-*2817*
A.B., Stanford, 1927			
[14]Harmon, F. Carlyle	San Jose	Chem. gr.	78 S. 10th, SJ-sj
A.B., Stanford, 1927, Engineer, 1928			
[4]Harold, Elbert Wilson	Pocatello, Ida.	LD ‡ 28+11	136 Encina-*503*
[21]Harold, Gilbert	Palo Alto	Econ. gr.	159 Melville, P-p
B.S., Pittsburgh, 1924			
Harper, Carlos E.	Ione	LD 49–38	33 Toyon-*2044*
[4]Harper, Evelyn Alice	Burlingame	Engl.-P.Sp. ‡	832 Fairfield, B-b
[5]Harper, Howard Edward	Los Angeles	Pre-Med. gr.	*227* Waverley, P-p
A.B., Occidental, 1925			
Harriman, Thomas Russell	Balboa	Law gr.	Delta Upsilon
A.B., Stanford, 1928			
Harrington, John F.	San Luis Obispo	LD 72+4	300 Toyon-*983*
Harris, Everett Glenn	Fresno	Econ. 129+49	Theta Chi-*1383*
[5]Harris, Ford Whitman, Jr.	Los Angeles	Phil. 122+28	Chi Psi-*1648*
Harris, Henry, Jr.	San Francisco	Engl.-P.Sp.18·125+55	563Ecn.-*626*
Harris, Janet	San Francisco	Pol.S. 180+126	330 Roble-*626*
A.B., Stanford, 1929			
[5]Harris, Lawrence W.	San Francisco	LD 47+24	231 Encina-*1773*
[5]Harris, L. Earl	Fresno	Soc.S.-Jn. 4·169+14	The. Chi-*1383*
[12]Harris, Marjory Ruth	Whittier	Engl. gr.	Madroño-*2504*
A.B., Whittier, 1928			
Harrison, Reginald Hugh	Hollywood	Hist. 119+12	Phi Delta Theta
[4]Harrison, Theta	Palo Alto	Educ. gr.	718 Bryant, P-p
A.B., West Virginia, 1920; A.M., Columbia, 1924			
Harroun, Catherine	Palo Alto	Engl. 181+117	Kappa Kappa Gam.
A.B., Stanford, 1929			
Hart, C. Allan	Portland, Ore.	LD 7·92+126	248 Branner-*1967*
Hart, George David	San Francisco	LD 74+10	139 Branner-*916*
Hart, James David	San Francisco	LD 40+5	364 Encina-*2514*
Hart, Russell Blackwell	Billings, Mont.	LD 87+146	Phi Gamma Delta
Hartley, George, Jr.	San Diego	Pre-Clin.183+105	Th.Dl.Chi-*1828*
A.B., Stanford, 1929			

Hartman, Milton Morris A.B., Stanford, 1929	San Francisco	Chem. 184+328	127 Branner
[4]Hartranft, S. Glenn	Delano	Educ. 24·145–1	650 San Juan-*1363*
Hartsough, C. William	San Diego	Psych. 140+94	133 Branner-*586*
[4]Hartwell, Anne Davis A.B., Stanford, 1928	Beaumont	Pol.S. gr.	302 Roble
[4]Hartwig, Elisabeth Jane	Yuba City	LD	324 Roble-*1033*
Hartzell, Homer Vincent	Portland, Ore.	Pol.S. 138+163	314 Toyon-*1212*
Harvey, Fred Charles	Spokane, Wash.	LD 92+28	Alpha Sigma Phi-*1225*
Harvey, J. Albert	Santa Ana	Econ. 46·83–8	252 Toyon-*909*
[4]Harvey, Lashley Grey A.B., William Jewell, 1925	California, Mo.	Pol.S. gr.	518 Webster, P-p
Harwood, Paul Lochry A.B., Stanford, 1929	Pasadena	Phil. 180+145	Delta Upsilon
[3]Hashimura, Mitsuo	Tokyo, Japan	Econ. 135·0–14	3910 Fulton, SF-sf
[4]Hastings, Mary Alice A.B., Smith, 1916	Pasadena	Hist. gr.	Madroño-*1045*
Hatch, Charlotte Cornelia A.B., Stanford, 1929	Pasadena	Engl.-P.Sp. gr.	248 Roble-*2585*
[5]Hatch, Ernest Edward	Gridley	LD 41+8	110 Encina-*665*
[12a]Hatch, Francis Nelson	Santa Rosa	Engl. 90·39+54	422 Encina-*1046*
[4]Haub, Hattie Dora Frances A.B., Stanford, 1903	Berkeley	Educ. gr.	271 Roble
[4]Hauser, George Henry	San Francisco	LD	126 Encina
Haussamen, Henry Crane A.B., Stanford, 1929	Grafton, N.D.	Econ. 105·87+56	Phi Delta Theta
[4]Haw, Harry Huber A.B., College of the Pacific, 1918	La Jolla	Educ. gr.	761 Columbia, M-*594*
[4]Hawes, Lillian Josephine	Riverside	Pub.H. ‡	Roble
Hawes, Truman Post	La Mesa	Chem. 90·41–1	327 Union-*1232*
[23]Hawk, Walter A.B., Stanford, 1929	Los Angeles	Soc.S. 133·49+53	561 Encina-*2051*
Hawkins, Elizabeth Ziemer	Reno, Nev.	LD 44+49	268 Roble-*1534*
Hawkins, Frederick Henry	Pasadena	LD 91+140	Phi Delta Theta
Hawkins, Helen Idelle	Hickman	LD 97+56	Sigma Kappa-*1327*
¶Hawkins, Ralph Leslie A.B., Stanford, 1929	Sheridan, Wyo.	S.Biol. 90·94+88	Pacific Grove-pg
Hawley, Abraham L., Jr.	El Paso, Texas	S.Engr.94·46+3	432 Encina-*5*
[23]Hawley, Robert Clinton	Santa Paula	Span. 31·71+9	Sig.Alpha Ep.-*1305*
Hay, Francis George	Bakersfield	LD 60+46	351 Encina-*1824*
Hayashi, Tetsuo B.S., Southern Methodist, 1927	Oita-ken, Japan	Ec.-Ac.gr.	472Shrdn.,M-Bx771,m
Hayden, Sheldon Miller	Azusa	Educ. 90·84+22	206 Sequoia-*1962*
[12]Haydock, J. Wesley	San Carlos	LD 74+44	San Carlos-Bx 3093, sc
[4]Hayes, Lloyd Hardy B.S., North Dakota, 1927	Sunnyvale	Educ. gr.	240 Francis, S-s
Hayes, Sidney Burrel	Bakersfield	Phyl.79·93+15	414Emerson,P-*2178*
[12]Hayhurst, L. Nelson A.B., Stanford, 1929	Fresno	Econ. 7·175+175	236 Toyon-*1204*
Hayland, Theophilus Nelson A.B., Chico State Teachers College, 1928	Durham	Educ. gr.	855 Waverley, P-p
Hayman, Richard E.	San Francisco	LD 59+44	306 Encina
Hays, Harford Holmes A.B., Stanford, 1924, A.M., 1927	Palo Alto	Engl. gr.	825 University, P-p
Hays, Marcia Susan A.B., Mills, 1925	San Mateo	Med. gr.	421 Crescent, SM-sm
Hazeltine, Herbert Samuel	Los Angeles	LD 82–1	Sigma Nu-*1385*

Hazeltine, Sherman — Prescott, Ariz. — Econ. 180+53 — Alpha Tau Omega
A.B., Stanford, 1929
[5]Healey, Edward Francis — San Francisco — Zoöl. 104·38–3 — Kappa Alpha
[4]Healy, Aileen M. — San Jose — Educ. gr. — 134 Tasso, P-p
A.B., San Jose State Teachers College, 1927
[4]Hearne, Allen — Sierra Madre — LD ‡ — 305 Lytton, P-p
Hearne, George Willard — Sierra Madre — Chem. 90·94+116 — 305 Lytton, P-p
A.B., Stanford, 1929
[2]Heath, Harrison — San Jose — Educ. gr. — 580 Emory Ct., SJ-sj
B.S., Washington, 1916, A.M., 1921
[4]Heatwole, Louise — Palo Alto — Educ. gr. — 428 Channing, P-p
A.B., Wells, 1912, A.M., 1913
[4]Heberling, Lois Patricia — Los Angeles — Ed.-G.A. ‡ — Roble-*1143*
Heche, Gordon F. — Alameda — LD 31–6 — 29 Encina-*1123*
[2/4]Hedderman, Maurice T. — Miami, Ariz. — Soc.S.-Jn. 135·32+10 — 210 Un.-*2159*
[4]Hedge, Hamilton Russell — San Francisco — LD — 118 Toyon-*1335*
[2]Hedge, Norman J. — Redwood City — LD 46–12 — Sigma Alpha Epsilon
Hedges, Judith Virginia — Oregon City, Ore. — Hist. gr. — 101 Roble
A.B., Stanford, 1928
[5]Heffelfinger, Raymond Wiley — Los Angeles — Hist. 88+25 — 115 Alma, P-p
[12]Heflin, Bertrand W. — Denton, Texas — Soc.S.-Jn.90·41–1 — 451 Chng, P-*533*
Hegy, Louis — San Jose — S.Engr. 90·52+27 — 448 S. 8th, SJ-sj
[4]Heicher, Winchester H. — San Anselmo — Hist. ‡ 14–1 — 301 Union-*2306*
Heiges, Laurence E., Jr. — Lompoc — Pre-Clin.201+148 — 245 Branner-*603*
A.B., Stanford, 1929
Heinecke, Walter — Santa Ana — Geol. 114+33 — 113 Encina-*2668*
Heiser, Peter Eugene — Stockton — LD 72+0 — Delta Upsilon
Heizer, Edward Jansen — Essex Fells, N.J. — LD 38–3 — 425 Waverley, P-p
Held, William Poage — Ukiah — LD 50·63+86 — 407 Encina-*832*
Heller, George Sydney — Stanford Univ. — Pre-Med. 118+18 — 762 Dolores
Helmke, Guy Martin — Fort Seward — Ed.-G.A. 124+56 — Theta Chi-*1383*
[5]Helmke, Rae F. — Fort Seward — Geol. 169+2 — 424 Seneca, P-*1383*
[5]Hembroff, Ruth Edwina — Victoria, B.C. — Engl.22·141+131 — Kap.Alpha Theta
Henderson, Beatrice M. — DeBegac, Colo. — LD 31·49+17 — 209 Roble-*534*
Henderson, E. O'Brien — San Jose — Econ. 90·90+33 — 161 E. Reed, SJ-sj
A.B., Stanford, 1929
Henderson, Emmett Edward — Campbell — Pre-Med. 90·47+28 — 105 Sequoia
[3]Henderson, Helen S. — Los Angeles — Econ. 135·14+15 — 261 Roble-*594*
[4]Henderson, Ida Peekema — Sacramento — Educ. gr. — Roble
A.B., California, 1921
Henderson, James E. — San Angelo, Tex. — Engl. 90·91+97 — 420 Encina-*517*
A.B., Stanford, 1929
[4]Henderson, Lester Dale — Juneau, Alaska — Educ. gr. — 957 Channing, P-p
A.B., Tarkio, 1911
Hendrixson, Lamont McKinley — Chino — S.Bus. gr. — 314 Union
A.B., Redlands, 1928
Henry, Florence May — Riverside — Engl. 90·45+26 — 276 Roble-*2725*
Henry, James Gordon — Montclair, N.J. — LD 70–8 — Delta Tau Delta-*1363*
Henry, Robert Archie — Stockton — S.Biol.90·47+18 — Phi Kappa Sigma
Henry, Thomas Browne — Los Angeles — LD 63+45 — 349 Hamilton, P-p
[124]Hensen, Louis John — Chinook, Mont. — Econ. 46·115+45 — 135 Branner-*1298*
[4]Hepp, Louis O. — Riverside — Educ. gr. — Buena Vista Camp, M
A.B., Willamette, 1917
[1]Hepp, Virgil Eugene — Long Beach — LD 43+39 — Phi Kappa Psi
Heppner, Myer John — Palo Alto — Anat. gr. — 257 Hawthorne, P-p
B.S., California, 1921, M.S., 1922

[134]Herbert, Arthur Sedgwick — Altadena — Econ. 125+3 — Delta Kappa Epsilon
Herbold, Paul — Los Angeles — Mil.S. 5·175+100 — 249 Toyon-*1192*
A.B., Stanford, 1929
Hereford, Jack H. — Tucson, Ariz. — Law gr. — 615 University, P-p
A.B., Arizona, 1928
[5]Herman, Fred Louis — Greeley, Colo. — Chem. gr. — 555 Harvard, M-*887*
B.S., Nebraska, 1921; A.M., Stanford, 1929
Hermann, Victor Albert — San Jose — Econ. 90·45+30 — 395 S. 10th, SJ-sj
Herminghaus, Earl George — St. Louis, Mo. — Engl. 90·90+47 — 583 Salvatʼra-*1383*
A.B., Stanford, 1929
Herndon, John Bostrom — Gonzales — LD 82+43 — 18 Branner-*2058*
[4]Herren, Dora Smith — Seattle, Wash. — Educ. gr. — 564 University, P
A.B., California, 1921
[5]Herrington, Lovic P. — Waynesboro, Ga. — Psych. gr. — Sigma Nu-*1385*
A.B., Stanford, 1927, A.M., 1929
[4]Herriott, Jesse Starr — Washington, D.C. — Educ. gr. — Kingscote-*3906*
B.S., Columbia, 1926, A.M., 1927
Hertzer, Lucile Cornelia — Tiffin, Ohio — Zoöl. gr. — Madroño
A.B., Heidelberg, 1928; A.M., Stanford, 1929
[12]Herz, Ludwig Ernest — Mayfield — Zoöl. gr. — Mayfield-m
A.B., Stanford, 1926, A.M., 1927
[4]Herzer, Harriett Catherine — SanFrancisco — LD — 637 Alvarado
[234]Hess, Harlan Bernard — Morrill, Nebr. — LD 45·29+26 — 40 Encina
Hesselmeyer, Harry Leonard — Palo Alto — LD 47+94 — 236 Byron, P-p
[1]Hester, Willis Elston — Mountain View — Educ. gr. — 542 Church, MV-mv
B.S., Colorado College, 1905
[1]Heston, Albert Eugene — Palo Alto — S.Bus. gr. — 260 Byron, P-p
A.B., Stanford, 1926
Hewitt, Dorothy — Long Beach — Med. gr. — 3845 California, SF-sf
A.B., Pomona, 1924
Hewlett, Louise Redington — San Francisco — LD 77+102 — Delta Gamma-*1366*
Hiatt, John Meredith — Rivera — Law gr. — 627 Waverley, P-*1299*
A.B., Stanford, 1928
Hibbard, Harold Oliver — San Francisco — S.Biol. 98·44+11 — Al.Sig. Phi-*1357*
[4]Hichborn, Paul R. — Lakeport — Educ. gr. — 1021 University, SJ-sj
A.B., Stanford, 1921
Hickerson, George, Jr. — Los Angeles — LD 48+13 — 202 Encina-*703*
Hickman, Hallien D. — Centerville, Iowa — LD 46+60 — 148 Roble-*706*
[23]Hickman, John, Jr. — Santa Monica — LD 20+2 — 138 Encina
Hicks, Aileen Leighton — Los Angeles — Pol.S. 191+145 — Chi Omega
A.B., Stanford, 1929
Hicks, Avery Morley — Berkeley — Med. gr. — 2220 Milvia, Berkeley-b
A.B., California, 1924
[234]Hieb, Otto Helmuth — Lodi — Germ. gr. — Theta Xi
A.B., Stanford, 1928
[34]Hiestand, John Hallam — San Mateo — Econ. 90·15–1 — Delta Tau Delta
[4]Higgins, Kenneth Clifton — Tulsa, Okla. — LD — 134 Toyon-*2281*
Higgins, Lawrence Nelson — Long Beach — LD 9·87+2 — 129 Branner-*546*
[4]Higginson, Augusta — San Francisco — Educ. ‡ — 380 Roble
Hightower, Ann McClaran — Orland — LD 47+4 — 146 Roble
[4]Hill, Amzetta Mary — San Jose — LD ‡ — 889 S. 11th, SJ-sj
[1]Hill, Forrest Macaulay — Sacramento — Econ. 181+110 — 534 Encina-*2757*
A.B., Stanford, 1929
Hill, Harry Hartley — Corona — Econ. 90·47+32 — 428 Encina-*1010*
Hill, Henry Eric — Redding — E.E. gr. — 213 Sequoia-*2393*
A.B., Stanford, 1929
Hill, Howard — Fort Worth, Texas — LD 9·37–16 — 108 Encina-*1923*

Hill, Joseph Blackburn Whittier Educ. gr. 226 Union-*2767*
A.B., Stanford, 1928, A.M., 1929
Hill, Lowell Reed Upland Med. gr. 2350 California, SF-sf
A.B., Pomona, 1925
Hill, Ruth Elizabeth Salinas Fr. 116+55 Kingscote
[4]Hill, Sallie H. Port Townsend, Wash. Educ. gr. Hotel Barker, P-p
A.B., Washington, 1911
Hillman, Harry Hayes Los Angeles LD 71+7 Zeta Psi-*B*
Hilmer, Frederick Birch Palo Alto Chem.15-133+151 350Embcro.,P-p
Hilmer, George Haskell San Francisco LD 58+35 204 Encina
[12]Hilmer, Roland William San Francisco Hist. 20-166+61 Chi Psi-*1648*
A.B., Stanford, 1929
[5]Himbert, Arthur Robert Palo Alto Law gr. 241 Fulton, P-p
B.S., California, 1921, M.S., 1924
Hinchliffe, John William, Jr. S. Pasadena LD 46–5 119 Encina-*1937*
[12]Hinckley, Horace Parker Redlands S.Engr.104-76+21 437Encina-*1882*
A.B., Stanford, 1929
[1]Hinckley, LeRoy Lafayette Watsonville Min. gr. Al. Kappa Lambda-*1551*
A.B., Stanford, 1928
[23]Hindry, Horace Waldo Denver, Colo. S.Engr. 140–6 219 Toyon-*1321*
Hines, Don Carlos San Jose Med. gr. Lane Hospital, SF-sf
A.B., Stanford, 1927
[23]Hines, Fred George San Rafael LD 30+47 450 Encina-*879*
Hines, Frederick Edwards San Rafael Law gr. 421 Encina-*896*
A.B., Stanford, 1928
[5]Hinkle, George Henry Menlo Park Engl. gr. Menlo Park-*2335*
A.B., Stanford, 1926, A.M., 1928
[4]Hirsch, James Marvin Los Angeles LD ‡ 117 Toyon-*546*
[4]Hirschman, John Adolph San Francisco LD 13+2 222 Toyon
Hise, Don William Des Moines, Iowa LD 92+72 Sigma Alpha Eps.-*1305*
[5]Ho, Tsu I. Szechuen, China Econ. gr. Chinese Club-*2462*
A.B., Stanford, 1929
[5]Ho, Yichun Hunan, China Pol.S. 90-54+18 591 Salvat'ra-*2547*
Hoagland, Jackson Phoenix, Ariz. Geol. 196+71 Delta Chi-*1304*
A.B., Stanford, 1929
Hobbie, Henry William Redwood City Chem. 170+30 311 Sequoia-*2791*
[5]Hobson, Oliver Lincoln Palo Alto Soc.S.-Jn.163+111 418Wavly.,P-p
[1]Hobson, Richmond Pearson Los Angeles LD 21–14 Alpha Delta Phi
[12]Hodges, Jack Ormond Tulare Soc.S.-Jn. 155+60 13 Toyon-*2668*
[28]Hodgson, John Robert Maricopa Bot. 130+21 428 Encina
Hoedel, Robert Blacow Oakland LD 90+69 126 Branner
[1]Hoffman, Clifford Pearson Petaluma Soc.S.-Jn. 185+59 Zeta Psi-*B*
A.B., Stanford, 1929
[4]Hogan, Fred P. Palo Alto Educ gr. 151 Addison, P-p
A.B., Fresno State Teachers College, 1925
Hoh, Daisy Law Palo Alto Educ. gr. 764 Channing, P-p
Ed.B., California at Los Angeles, 1924; A.M., Stanford, 1929
Hoh, Yam Tong Palo Alto Educ. gr. 764 Channing, P-p
A.B., Canton Christian, 1923; A.M., Stanford, 1929
[4]Holbrook, C. Ray San Bernardino Educ. gr. 475 Forest, P-p
Ed.B., Washington, 1919, A.M., 1922
Holbrook,Raymond Brimhall Provo,Utah Law gr. 164 Tasso, P-p
B.S., Brigham Young, 1927
[4]Hollenberg, George Jacob La Verne Bot. gr. 1246 Sinex, PG-pg
A.B., LaVerne, 1921; A.M., Manchester, 1922
Holley, Marion Visalia Soc.S.136+210 Sigma Kappa-*1327*
[4]Hollingsworth, Everett West Branch, Ia. Educ. gr. 1119 High, P-p
B.S., Pennsylvania, 1922

Hollingsworth, John Binford — Hemet — Pre-Clin. 186+199 — 108 Brnr.-*2795*
A.B., Stanford, 1929
[12]Hollingsworth, William I. — Los Angeles — Econ. 195+19 — Delta Kappa Eps.-*O*
A.B., Stanford, 1929
Holman, Cranston W. — San Francisco — Med. gr. — 112 Walnut, SF-sf
A.B., Stanford, 1927
[1]Holmes, Harlan Banta — Palo Alto — Zoöl. gr. — 1314 Parkinson, P-p
A.B., Stanford, 1922
[4]Holmes, Helen Everett — San Jose — Educ. gr. — 87 S. 17th, SJ-sj
A.B., San Jose State Teachers College, 1927
[2]Holmes, Herbert McG. — Hayden Jn., Ariz. — Chem. 86+58 — 306 Union-*715*
[4]Holstrom, Eric Gustaf — Palo Alto — LD — 343 Byron, P-p
[5]Holt, Achilles Madison — El Paso, Tex. — LD 54+21 — 246 Encina-*1523*
Holt, Parker Morton — Piedmont — LD 43+23 — 318 Encina-*1224*
Holt, Pliny Guernsey — Stockton — LD 27–2 — 335 Encina-*1676*
Holt, Richard Fillius — Caldwell, Idaho — Econ. 14·179+115 — 320 Encina-*15*
A.B., Stanford, 1929
Holtz, Walter Wittig — Los Angeles — LD 42+14 — 44 Encina-*2557*
Home, Paul Kimball — Los Angeles — Law gr. — 515 Oberlin, M-*2049*
A.B., Pomona, 1926; J.D., Stanford, 1929
[4]Homewood, Boyd C. — Rainier, Ore. — Engl.-P.Sp.gr. — 322 Hwth., P-*1090*
B.S., Oregon, 1927
[4]Hooker, Grover C. — Jackson, Miss. — Educ. gr. — 257 Hawthorne, P-p
A.B., Colorado, 1924, A.M., 1924
[23]Hoover, Allan — Stanford Univ. — Econ. 180+52 — San Juan-*708*
A.B., Stanford, 1929
[4]Hoover, John Fred — Yuma, Ariz. — LD sp. — 611 Bryant, P-p
Hoover, William George — San Mateo — E.E. gr. — 100 Peninsular, SM-sm
A.B., Stanford, 1928, Engineer, 1929
[4]Hopkins, John James — San Francisco — Phyl. ‡ — 1086 Church, SF-sf
[4]Hopkins, Robert James — San Mateo — Educ. gr. — 11 E. Poplar, SM-sm
A.B., California, 1920, A.M., 1922
Hopkins, Warren Daniel — Los Angeles — Econ. 165–3 — Kappa Sigma-*1326*
[4]Hopkins, William Stephen — Portland, Ore. — Econ. gr. — 549 Stanford, M-m
B.S., Oregon, 1925, M.S., 1928
Hoppaugh, Katherine W. — SaltLakeCity,U. — Bot. gr. — Madroño-*2123*
B.S., Arizona, 1924; A.M., Stanford, 1929
[12]Hopper, Franklyn Winone — Palo Alto — Econ.50·133+31 — 305 Churchill, P-p
A.B., Stanford, 1929
[1]Hopper, Lois Wilbur — Palo Alto — S.Biol. 127+34 — Stanford Univ.
[34]Horine, William Henry — Okmulgee, Okla. — Law gr. — Alpha Sigma Phi-*1357*
A.B., Stanford, 1927
[4]Horsey, Catharine W. — Santa Barbara — Educ. ‡ — 360 Roble
Horton, Carrol Herbert — Fresno — S.Engr.90·90+31 — 306Sequoia-*1244*
A.B., Stanford, 1929
Hossom, Lynn Overton — Long Beach — Law gr. — Alpha Tau Omega-*1384*
A.B., Stanford, 1928
[1]Hotchkiss, Harold Kidwell — Pasadena — Law gr. — Alpha Sigma Phi-*1357*
A.B., Stanford, 1927
[1]Houghton, Leroy Bryan — Norwalk — Span ‡ — 215 Cowper, P-p
Houston, D. Crawford — Panguitch, Utah — S.Bus. gr. — 733 Homer, P-p
B.S., Brigham Young, 1927; M.B.A., Stanford, 1929
How, John Harry — San Francisco — Econ. 132+60 — 236 Toyon-*2621*
How, John Hock — Canton, China — S.Engr. 157+16 — Chinese Club
[12]Howard, LBen — Palo Alto — Econ. 77·36–8 — 319 Middlefield, P-p
Howard, Lot Duncan — San Jose — Zoöl.-Md.189+211 — 327 Wvly., P-p
A.B., Stanford, 1929
Howe, Charles Roland, Jr. — Atascadero — LD 70–4 — Theta Chi

[4]Howe, J. Wendell B.S., Oregon State Agricultural, 1924	Oakland	S.Biol. gr.	201 Toyon
Howe, Robert H.	Hollywood	LD 93+74	Theta Chi-*1383*
Howell, Alfred Charles, Jr.	Los Angeles	LD 83+27	17 Toyon-*2712*
[4]Howell, Editha A.B., Southern California, 1918	Pasadena	Hist. gr.	370 Roble
Howell, James Francis	El Segundo	LD 89+92	Delta Tau Delta-*1363*
Howell, Leslie Lee	El Segundo	LD 47+80	316 Encina-*1413*
Howlett, Frank, Jr.	San Francisco	Chem. 169+173	AlphaKp.Lm.-*658*
Hoxie, Henry Luke	Los Angeles	S.Engr.146+26	Del.Tau Del.-*2432*
[4]Hoxsie, John W.	Huntington Beach	LD 30·48–26	Kappa Sigma-*1326*
[4]Hoy, Elvin Albert B.S., Oregon State Agricultural, 1925	Portland, Ore.	Math. gr.	557 Lasuen
Hoyt, Harrison Val B.S., Purdue, 1913	Provo, Utah	S.Bus. gr.	Kingscote
[3]Hoyt, Helen Grace B.S., Brigham Young, 1926	Provo, Utah	Engl. gr.	21 Kingscote
Hromadka, John Ben	Santa Monica	Pre-Med. 126+2	Kappa Alpha
Hubbard, Royal Eugene	Gooding, Idaho	LD 87+49	211 Toyon-*2703*
[234]Hubbard, William Henry, Jr.	Los Altos	Econ. 181–2	Phi Kappa Sigma
[15]Hubler, Fred Faber	El Segundo	Econ. 153+25	Kappa Sigma-*1326*
Hubler, Gaylord Neal A.B., Stanford, 1929	Porterville	Law 184+58	637 Alvarado-*805*
[5]Hudson,BradfordBarnhisel	PacificGrove	Chem. 134+85	239 Branner-*1468*
Hudson, Charles Milburn	Ardmore, Okla.	LD 5·67+13	Phi Gamma Delta
Huff, Mary Jean A.B., Stanford, 1929	Kellogg, Idaho	Soc.S. 95·94+141	248 Roble-*2512*
[4]Hughes, Alice Ethel A.B., St. Mary's, 1911; A.M., Wisconsin, 1916	San Diego	Educ. gr.	*322* Roble-*857*
Hughes, Cornelius Louis A.B., Stanford, 1927	San Francisco	M.E. gr.	*233* Union-*1525*
[23]Hughes, Mina Brunton	Burlingame	LD 22·31+33	149 Roble-*957*
[234]Hughes, Olin Rice	Santa Clara	Hist.60·56+7	1565Franklyn,SC-sc
[23]Hulen, Ray J.	Long Beach	LD 83+9	21 Toyon
Hulme, Mary A.B., Stanford, 1928	Palo Alto	Fr. gr.	638 Channing, P-p
Hulsman, Walter Charles A.B., Stanford, 1929	Campbell	Hist. 180+65	Delta Upsilon
Hume, Jackson Walter	San Francisco	LD 45·35+5	309 Encina
Hume, Robert Arthur A.B., Stanford, 1929	Brookings, S.D.	Engl. 3·189+225	331 Encina-*1468*
Humphrey, Grace A.B., Stanford, 1929	Fort Collins, Colo.	Fr. 94·87+125	Gam. Phi Beta-*1337*
Humphreys, Cecil Walter A.B., College of the Pacific, 1927; Engineer, Stanford, 1928	Stockton	Chem. gr.	311 Union-*1092*
[7]Humphreys, Philip E.	Madera	LD 56+7	Theta Delta Chi-*2713*
Huneke, John Sherwood	Spokane, Wash.	LD 42+30	304 Encina-*1751*
Hungate, Robert Edward A.B., Stanford, 1929	Cheney, Wash.	S.Biol. 90·92+167	1425 Alma, P-p
Hunken, John William	San Francisco	LD 82+25	Kappa Sigma-*1326*
Hunt, Albert Barker	Santa Barbara	LD 44+23	123 Encina-*1961*
[4]Hunt, Byron Lewis	Los Gatos	LD sp.	245 Toyon-*551*
[5]Hunt, D'Arcy Swain	Graton	Chem. 90·82–4	613 Salvat'ra-*828*
Hunt, Ernest Paul A.B., Indiana, 1913	Palo Alto	Phys.Ed. gr.	127 Harriet, P-p
Hunt, Frederick Tunstall	Pasadena	LD 91+76	Delta Upsilon
[5]Hunt, John MacLain	Glendive, Mont.	Econ. 171+140	1033 Guinda, P-p

Hunt, Robert Walter — Santa Barbara — Med. gr. — 341 Portola, P-p
A.B., Stanford, 1926
Hunter, Francis Bernard — San Diego — LD 46+0 — 303 Encina-*1675*
[12]Hunter, Lewis Warren — Sacramento — LD 104+3 — Phi Gamma Delta
Hunter, Wayne Edwin — San Jose — Econ.-Acct. 109–12 — 212 Sequoia
[4]Huntington, David — Los Gatos — LD — 312 Union-*809*
Huntington, Harriet — Pasadena — LD 48·45+51 — 180 Roble-*112*
[4]Huntington, Margaret Alice — Dillon, Mont. — Engl. gr. — 337 Roble-*897*
A.B., South Dakota, 1916
Huntington, Virginia — Palo Alto — Ed.-G.A.15·165+27 — 516 Kgsly., P-p
A.B., Stanford, 1929
[1]Hupp, J. Kenneth — Berkeley — LD 7·49+5 — 1465 Webster, P-p
Hupp, William Ward — Berkeley — LD 43+2 — 121 Encina-*2456*
Hurd, Arthur Bentley — Aurora, Ohio — LD 60·38–16 — 555 Waverley, P-p
Hurlbut, John Bingham — Los Angeles — Pol.S.gr. — 567 Lincoln, P-Bx291, p
A.B., California at Los Angeles, 1928
Hurt, Arthur Curtis, Jr. — Los Angeles — Pol.S. 134+41 — Al. Sigma Phi-*2734*
Husband, Richard W. — Hanover, N.H. — Psych. gr. — 529 Encina-*1752*
A.B., Dartmouth, 1926; A.M., Stanford, 1927, Ph.D., 1929
[4]Hussman, Mathilda J. — Gardnerville, Nev. — Educ. gr. — 471 Channing, P-p
A.B., Nevada, 1912
[4]Huston, Raymond Sylvester — Berkeley — LD — 122 Encina
Hutcherson, Mervin L. — San Francisco — Econ. 153+78 — 227 Branner-*632*
[12]Hutchins, McConnell L., Jr. — El Paso, Tex. — M.E. 90·111+42 — 234 Union-*2467*
A.B., Stanford, 1929
Hutchinson, Geo. G. — Bradley Beach, N.J. — LD 42+6 — 118 Encina-*1735*
[5]Hyde, Ben Cooper — Fairfield — Geol. 129+18 — 736 Webster, P-p
Incerti, Joseph Marion — Fort Bragg — S.Engr. 109·27–11 — 424 Encina
Inch, Thomas Turner — Los Angeles — LD 67–11 — Chi Psi-*1648*
[12]Ingelow, George Carpenter — Palo Alto — Econ. gr. — 345 Forest, P-p
A.B., Stanford, 1914, A.M., 1928
¶Ingraham, Alice Louise — Yuma, Ariz. — Hist. 15·142+193 — Delta Gam.-*1366*
[1]Ingram, William Truitt — Palo Alto — C.E. 150+62 — 825 Cowper, P-p
[3]Ireland, Cornelia S. — Portland, Ore. — Span. 106·14+21 — 358 Roble-*634*
[23]Iriki, Henry Masanori — Oakland — Pre-Med. 111·26+18 — Jap. Club-*855*
Iriki, Walter Keisuke — Oakland — Med. gr. — 2150 Bush, SF-sf
A.B., Stanford, 1928
Irving, Gordon Leith — Palo Alto — LD 88+29 — 459 Homer, P-*2169*
Irving, Lois Edmund — Palo Alto — Educ. gr. — 459 Homer, P-*2169*
A.B., Stanford, 1928
[4]Isaac, Winona Estella — Corning — Educ. gr. — 1035 Parkinson, P-p
A.B., California, 1920
Isaacs, John Bailey — Los Angeles — LD 88+75 — Theta Chi-*1383*
[1]Islay, Ruhland Delbert — Mansfield, Ohio — LD 58+4 — Phi Gamma Delta
Ishikawa, Tokio — San Jose — LD 91+128 — 248 Jackson, SJ-sj
[5]Israel, Harry Frederick — Mayfield — Psych. gr. — 520 University, P-p
A.B., Stanford, 1927
Israel, Hugh Rock — Palo Alto — Zoöl. 144+73 — 813 Cowper, P-p
[4]Ita, Florence Carolyn — San Jose — Bot. gr. — 460 S. 6th, SJ-sj
Ph.B., Chicago, 1925
Ito, Tomo — Pasadena — LD 36·23–6 — 1335 Cowper, P-*1894*
Izzard, Carl Frederick — San Mateo — C.E. 180+222 — 218 Branner-*2812*
[4]Jacks, Hugh Jay — San Francisco — LD ‡ — 717 Dolores
Jackson, Carl Raymond — San Francisco — Med. gr. — 2356 California, SF-sf
A.B., California, 1925
Jackson, Elizabeth — Webster Groves, Mo. — LD 50+63 — 349 Roble-*718*

[4]Jackson, Marie Herbert A.B., Stanford, 1911	Los Angeles	Hist. gr.	318 Roble-*835*
Jackson, Paul Edgar A.B., Stanford, 1926, J.D., 1929	Los Gatos	Law gr.	206 Union-*950*
[4]Jackson, Paul T. Ph.B., Linfield, 1921	Klamath Falls, Ore.	Educ. gr.	828 Cowper, P-p
[12]Jackson, Robert Charles A.B., Stanford, 1929	Los Angeles	Econ. 5·176+93	*226* Toyon-*2782*
Jackson, Rodney Norris	San Francisco	LD 88+15	Theta Chi-*1383*
Jacobs, Alfred Edward A.B., Stanford, 1929	Santa Monica	Econ. 183+246	103 Sequoia
[5]Jacobs, Edward Harold	Los Angeles	Econ. 135·45–11	512 Encina-*516*
Jacobs, Lewis Grant, Jr. A.B., Stanford, 1928	San Francisco	Med. gr.	2955 Buchanan, SF-sf
Jacobs, Melville L.	Paso Robles	Med. gr.	2211 California, SF-sf
[2]Jacobsen, Doris Isabelle A.B., California at Los Angeles, 1928	Palo Alto	Engl. gr.	248 Mariposa, P-p
¶Jacobson, David S.	Brawley	Hist. 152+108	215 Encina-*1664*
[4]Jaeger, Waldemar John A.B., Fresno State Teachers College, 1925	Porterville	Educ. gr.	665 Hanover, M-m
Jagels, George Daniel A.B., Stanford, 1929	Mountain View	Pol.S. 201+208	205 Sequoia-*2367*
Jago, Beatrice Ysobel	Palo Alto	Hist. 103+30	238 Roble
Jago, John B.	Palo Alto	S.Let. 169+162	510 Lowell, P-p
Jakunin-Malushin, Nicholas T. A.B., Stanford, 1928	Cupertino	C.E. gr.	Cupertino-Bx 186,Rt.A,c
Jamart, Gustave Emile J.	San Francisco	LD 98+43	214 Sequoia-*2761*
[12]James, Albert Louis A.B., Stanford, 1927	Denair	S.Bus. gr.	308 Sequoia
James, Allan Harris	Hollywood	LD 49+40	336 Encina-*1468*
James, Ben Wylie	Hollywood	S.Engr. 144+188	116 Toyon-*1468*
§James, Edwin Russell	San Jose	Germ. 90·46+42	182 N. 10th, SJ-sj
[12]James, Leonard D.	Denair	Econ. 90·84+12	308 Sequoia
James, Martha A.B., College of the Pacific, 1919	San Francisco	Med. gr.	3845 California, SF-sf
James, Mary Louise	Oakland	LD 47+13	279 Roble-*2303*
James, Ralph Rutherford	SanLuisObispo	LD 86+3	349 Hamilton, P-p
Jameson, Adelaide A.B., Stanford, 1920, A.M., 1921	Corona	Chem. gr.	615 Lasuen-*1040*
Jameson, Eloise A.B., Stanford, 1910, A.M., 1912	Corona	Chem. gr.	615 Lasuen-*1040*
Jameson, Moroni A.B., Stanford, 1929	Long Beach	Geol. *226*+56	Fair Oaks-*522*
[4]Jamison, Emma V. A.B., Stanford, 1925	Santa Clara	Educ. gr.	Roble
Jamison, Jean	Alameda	LD 45–6	266 Roble-*2135*
Janda, Robert Lyon A.B., Stanford, 1928	Los Angeles	Law gr.	309 Union-*1952*
[5]Janin, Louis Dunbar	Piedmont	Law 50+*23*	210 Encina-*693*
Jayne, Edith	San Francisco	Soc.S. 135+208	Alpha Phi-*1387*
Jellinek, Emil Otto, Jr.	San Francisco	Econ. 23·105+4	113 Branner-*2196*
[12]Jenkins, Kenneth Baxter A.B., Stanford, 1929	San Francisco	S.Biol.68·113+30	Phi Gamma Del.
Jenkins, Olaf Pitt A.B., Stanford, 1913, A.M., 1915	Palo Alto	Geol. gr.	630 Amherst, P-*1945*
Jenney, William Whitten	San Diego	LD 39–15	*226* Encina-*723*

§Deceased, July 23, 1929.

[5]¶Jennings, John Paul	Portland, Ore.	Pol.S. 142+138	Delta Chi-*1304*
Jensen, Albert Abe	Susanville	Econ.90·47+7	414Emerson,P-*1733*
Jessee, Theodore William	Santa Ana	Econ. 87·45+23	305 Sequoia-*1229*
[5]Jessen, Jack M.	Pomona	Law gr.	559 Cowper, P-p
A.B., Pomona, 1926			
[4]Johns, Floyd Marion	Hamakuapoko,T.H.	Engl. gr.	333 Waverley, P-p
A.B., Kansas, 1909			
Johns, Ned Burt	Huntington Park	LD 43+13	328 Encina-*1922*
[34]Johnson, Arthur Beers	Palo Alto	Chem. gr.	403 Kingsley, P-p
A.B., Stanford, 1927, A.M., 1928			
Johnson, C. Merton	Whittier	S.Bus. gr.	223 Union-*1273*
A.B., Whittier, 1928			
[13]Johnson, Edna Mae	Sacramento	Educ. gr.	Alpha Phi-*1387*
A.B., Stanford, 1928			
[4]Johnson, Effie Victoria	San Diego	Educ. gr.	775 S. 9th, SJ-sj
A.B., Nebraska, 1915; A.M., California, 1924			
[4]Johnson, Floyd Arlington	San Diego	Educ. gr.	775 S. 9th, SJ-sj
A.B., Nebraska, 1922			
[5]Johnson, Floyd Lemuel	Stanford Univ.	Geol. 142+35	423 Encina-*1014*
Johnson, Francis Comer	Menlo Park	LD 98+8	Menlo Park-Box 601,mp
Johnson, Frederick Albion	Hayward	LD 82–3	506 Mayfield
[12]Johnson, Hilton Olaf	San Francisco	LD sp. 53+1	214 Toyon-*2682*
Johnson, Joseph Dykes	Taft	LD 94+18	201 Toyon-*2786*
Johnson, Joseph Warren	Los Angeles	LD 80–2	Phi Kappa Psi
[12]Johnson, Judith Ellen	Long Beach	Hist. gr.	305 Roble-*1592*
A.B., Stanford, 1928, A.M., 1929			
Johnson, K. Ronald	Sioux City, Iowa	Bact. 102·38+18	105 Emerson, P-p
Johnson, Leland Francis	Los Angeles	LD 24–10	346 Encina-*2137*
[2]Johnson, Mary Magdalene	Palo Alto	Fr. 90·16+24	515 University, P-p
[23]Johnson, Melvin Harold	San Jose	Law gr.	411 N. 2d, SJ-sj
A.B., Stanford, 1926			
Johnson, Robert Courtney	Redwood City	LD 84+8	208 Sequoia-*1117*
Johnson, Robert Willus	Tacoma, Wash.	Econ. 91·48+39	403 Encina-*2541*
Johnson, Theodore A.	Pittsburgh, Pa.	LD 34–16	46 Encina-*1851*
[4]Johnson, Thorwald	San Francisco	LD ‡	1835 8th Ave., SF-sf
Johnson, Walter Albert	Piedmont	Med. gr.	2180 Washington, SF-sf
A.B., Stanford, 1928			
[34]Johnson, Walter Andrew	Palo Alto	Econ. 6·152–9	349 Hamilton, P-p
[12]Johnson, William Edward	San Francisco	Econ. 183+24	Phi Gamma Delta
A.B., Stanford, 1929			
Johnston, Francis N.	Washington, D.C.	Geol. gr.	207 Union-*553*
A.B., Harvard, 1927			
[12]Johnston, Fred Dean	Santa Ana	LD 114+70	210 Branner
Johnston, Willard Spencer	San Mateo	LD 57+33	201 Encina
Johnston, William Barksdale	Fresno	Law gr.	419 Encina-*1468*
A.B., Stanford, 1928			
[12]Johnstone, William C., Jr.	Denver, Colo.	Pol.S. gr.	567 Lincoln, P-p
A.B., Denver, 1924, A.M., 1927			
Jones, Beatrice Arline	Palo Alto	Span. gr.	1506 College, M-*1217*
A.B., Whitman, 1927; A.M., Stanford, 1928			
§[12]Jones, Donald	Santa Maria	Educ. 90·34+36	432 Encina-*1631*
Jones, Edmund Hawley	Portland, Ore.	Hist. 143+118	323 Sequoia-*2521*
[21]Jones, Evan Winthrop	Palo Alto	M.E. gr.	101 Middlefield, P-p
B.S., Denison, 1925			
Jones, George Cambell, Jr.	Palo Alto	LD 45·60–8	2130 Emerson, P-p

§ Deceased, March 22, 1929.

Jones, Hally Foster — Eureka — Educ.122·59+22 SigmaKappa-*1327*
A.B., Stanford, 1929
Jones, Helen Frances — Nevada City — Fr. 142+234 337 Roble-*2642*
[c]Jones, Herbert Auton — Burlingame — Econ. 90·15+2 1513 Sanchez, B-b
Jones, Ira Houston — Southgate — LD 82+3 1168 Greenwood, P-*2741*
Jones, Iva Marie — Fort Dodge, Iowa — Engl. gr. 317 Roble-*1137*
A.B., Iowa, 1928
Jones, John Paul — Cody, Wyo. — Chem. 105+9 Chi Psi-*1648*
Jones, Kendall — Bakersfield — LD 49·47+30 41 Encina-*2762*
Jones, Lorraine F. — Kirkwood, Mo. — S.Bus. gr. Sigma Alpha Eps.-*1305*
B.S., Washington University, 1926
Jones, Madison Ralph, Jr. — Oakland — LD 88+43 217 Branner-*2054*
Jones, Malcolm Nixon — San Bernardino — Med. gr. 2207 Buchanan, SF-sf
A.B., Stanford, 1927
Jones, Mary Edith — Palo Alto — LD 91+46 Chi Omega-*724*
[5]Jones, Melvin Richard — Portland, Ore. — Pre-Med.119+63 Al.TauOm.-*1384*
[2]Jones, Robert Francis — Glendale — LD 28+37 245 Encina
[23]Jones, Squier — Palo Alto — Econ. 89·45+7 530 Crescent, P-p
Jordan, Donald Weller — Los Angeles — Econ. 135·49+42 328 Union-*1736*
A.B., Stanford, 1929
[5]Jordan, Jack Carrol — Gillette, Wyo. — Econ. 132+40 251 Emerson, P-p
[4]Jorgensen, Margretha — Yacolt, Wash. — Ed.-G.A. ‡ 48+48 342 Roble
[4]Jory, Harold B. — Everett, Wash. — Educ. gr. 650 Lasuen
A.B., Willamette, 1915
Joujon-Roche, G. Felix — Alhambra — LD 79+26 Sigma Chi-*628*
Juda, Felix Edwin — San Francisco — LD 59+57 210 Encina
Judson, Martha E. — Palo Alto — Engl. 137+65 1325 Cowper, P-p
[6]Juliano, Jose B. — Manila, P.I. — Bot. gr. 801 Waverley, P-p
B.S., Philippines, 1923, M.S., 1925
Jurs, Peter Clyde — Piedmont — LD 45+72 220 Encina-*2146*
[5]Jury, Meta Elizabeth — Palo Alto — LD 77+64 Kappa Kappa Gamma
Kachlein, George F., Jr. — Tacoma, Wash. — Econ.90·99+107 947 Waverley,P-p
A.B., Stanford, 1929
[4]Kackley, Evan Morgan — Long Beach — Pre-Clin.135+152 2085Scto.,SF-sf
Kaehler, Edward Malcolm — Butte City — LD 64+32 108 Encina-*902*
Kaetzel, Jack Philip — San Luis Obispo — LD 43+29 124 Encina-*1484*
Kahn, Felice Adler — San Francisco — Soc.S. 143+107 277 Roble-*2644*
Kalenborn, Margaret — Redwood City — Econ. gr. 66 Jeter, RC-rc
A.B., Stanford, 1928
[5]Kaler, James Edward — Sacramento — Educ. gr. 555 Lytton, P-p
A.B., Stanford, 1929
[5]Karl, Charles Edward — Los Angeles — LD 37+19 207 Encina-*1516*
Karmel, H. Burress — Burlingame — LD 86+35 1575 Newlands, B-b
[12]Karr, Frank Randolph — Los Angeles — Law gr. 321 Union-*1607*
A.B., Stanford, 1926, J.D., 1929
Kartsaklides, Vasileos George — Palo Alto — Cl.Lit.73·108+8 Hotel PaloAlto, P
A.B., Stanford, 1929
Kaseberg, John Kenneth — Portland, Ore. — Law gr. 312 Union-*808*
A.B., Stanford, 1928
Katzev, Arthur J. — Los Angeles — LD 45+74 206 Encina-*1426*
Katzev, Herbert Herman — Los Angeles — LD 88+85 115 Branner-*1426*
[1]Kauffman, Donald H. — Des Moines, Iowa — Educ. gr. 189 Cowper, P-*1185*
A.B., Drake, 1928
[4]Kauffmann, Helen Eleanor — Sacramento — Educ. gr. 110 Roble
A.B., San Jose State Teachers College, 1927
[14]Kaulfers, Walter — La Jolla — Educ. gr. 678 Mirada-*2002*
A.B., San Diego State Teachers College, 1925; A.M., Stanford, 1929

Kavanaugh, Charles Richard Hollywood Law gr. 418 Encina
A.B., Stanford, 1928
Kavanaugh, R. Norbert Portland, Ore. Law gr. 159 Emerson, P-*1575*
A.B., Notre Dame, 1926; J.D., Stanford, 1929
Kawaguchi, Tadashi Shizuoka, Japan S.Engr.186+113 JapaneseClub-*598*
A.B., Stanford, 1929
[2,4]Kawakami, Yasota Tokyo, Japan Chem. gr. Japanese Club-*598*
M.S., Tohuku Imperial University, 1926
Kay, Raymond Myer Los Angeles Med. gr. 2410 Pacific, SF-sf
A.B., Stanford, 1927
Kazanjian, John Casey Los Angeles Law gr. 536 Encina-*2282*
A.B., Stanford, 1928
[1]Keating, Hallie Joyce Los Altos Engl. 182+55 Los Altos-*1053*
A.B., Stanford, 1929
Keeble, Robert Edgar Palo Alto LD 42–3 1901 Bryant, P-p
[2]Keefe, Irwin James Martinez LD 56–9 113 Toyon-*955*
Keegan, Thomas James Palo Alto Law gr. 211 Seale, P-p
A.B., Stanford, 1928
Keeler, Leonarde Berkeley Psych.14·182–28 MenloHeights-*16*
[2]Keeley, R. Dale Palo Alto LD 34·80–14 1744 Cowper, P-p
[4]Keenan, Hugh San Francisco LD ‡ 117 Toyon
Keerl, Robert Denison Stanford Univ. Mil.S. 5·182+5 Alpha Delta Phi-*J*
A.B., Stanford, 1929
Keho, Katherine M. San Francisco LD 91+126 Kappa Kappa Gamma
Kehr, Philip Phoenix, Ariz. Soc.S.21·113+114 611Wavly.-*1030*
Keith, John Banwell Los Angeles Econ. 180+80 759 Webster, P-p
A.B., Stanford, 1929
Kellar, Kenneth Chambers Lead, S.D. Law gr. Staller Ct.,P-p
A.B., Michigan, 1926; LL.B., Stanford, 1929
[2,4]Kellenberg, George A. Palo Alto Econ. 45·122+56 528 Encina
[4]Keller, Don Patterson Econ. 118· 560 Salvatierra-*1648*
Keller, Richard Junior San Gabriel LD 47+3 120 Encina-*2201*
[5]Keller, William Wessell Napa Engl. gr. 275 Hamilton, P-p
A.B., St. Mary's, 1928
Kelley, Hazel Hope Stockton Hist. gr. Menlo Heights-*2026*
A.B., College of the Pacific, 1928; A.M., Stanford, 1929
Kelley, James Askew Tulsa, Okla. LD 50+52 351 Encina-*2562*
[5]Kelly, E. Lowell Mayfield Psych. gr. 533 Cornell, M-*2344*
B.S., Purdue, 1926; A.M., Colorado State Teachers College, 1928
Kelly, Handel Whittaker Menlo Park Educ. gr. 1007 Forest Ct., P-p
A.B., Stanford, 1924, A.M., 1929
Kelly, James Edward Los Angeles LD 36–2 309 Encina-*2103*
Kelly, John Henry Palo Alto Hist. 181+91 909 Cowper, P-*1363*
A.B., Stanford, 1929
Kelly, John Thomas El Segundo LD 89+33 Sigma Chi-*628*
[5]Kelly, Marshall Wilton Placerville LD 25+14 234 Encina-*2225*
Kempenich, Margaret L. Portland, Ore. LD 90+97 Gamma Phi Beta-*1337*
Kendall, Burt Charles San Francisco LD 41–10 230 Encina-*2254*
Kendall, Donald Grant Oakland LD 92+132 Theta Delta Chi-*1828*
Kendall, Nathaniel James San Francisco LD 46+22 230 Encina-*2254*
[4]Kendall, Raymond Floyd Mountain View Educ. gr. Kendell Dell, MV-mv
A.B., San Jose State Teachers College, 1927
Kendrick, Marron San Francisco LD 85+21 Sigma Nu-*502*
[12]Kengel, Edward Francis Los Angeles Econ. 15·151–1 Alpha Delta Phi-*J*
[14]Kennedy, Audley Robert Mexia, Tex. Educ. gr. 1147 Ramona, P-p
A.B., Southwestern, 1914, A.M., 1914
[4]Kennedy, Chester Chico Engl. gr. 538 Lasuen-*2398*
A.B., Chico State Teachers College, 1927

Kennedy, Edward Lauderdale	La Jolla	Econ. 119+17	Theta Xi
Kennedy, James Miller	Palo Alto	LD 47–4	435 Coleridge, P-p
[5]Kennedy, John Hanscom	La Jolla	Econ. 158+72	136 Branner-*2671*
Kennedy, William Howard	El Centro	Soc.S.-Jn.90·46+29	247 Alma, P-p
[1]Kenney, John Edward A.B., Stanford, 1929	Venice	Econ. 180+96	Phi Delta Theta
[23]Kenney, John Meredith	San Francisco	LD 78+14	Al. Kappa Lambda-*658*
Kenny, George Verner	Sausalito	LD 47·47+51	344 Encina-*821*
Kerl, Phil Lederiegch	Pebble Beach	LD 32+21	324 Encina-*2451*
Kern, Albert Eugene	San Francisco	Econ. 161+23	Phi Kappa Psi
[4]Kerner, Francis Xavier A.B., St. Ignatius, 1929	San Francisco	Law gr.	334 Union-*627*
[3]Kerr, J. Russell B.S., California, 1914	Ramona	Educ. gr.	Stanford Univ.
[1]Keyes, Henry Eddy A.B., Stanford, 1928	Minneapolis, Minn.	S.Bus. gr.	Delta Upsilon
[5]Kibby, Leo Paul	Half Way, Mo.	Hist. 156+20	216 Encina-*1115*
[5]Kiech, Veon Carter A.B., New Mexico, 1924; A.M., Stanford, 1928	Albuquerque, N.M.	Chem. gr.	344 Middlefield, P-p
Kildale, Doris Kell A.B., Stanford, 1926, A.M., 1927	Eureka	Bot. gr.	667 Melville, P-*922*
Kimball, George Pulsifer A.B., Stanford, 1929	Honolulu, T.H.	Pol.S. 182+11	Phi Kappa Sigma
Kimball, Gordon Stanley A.B., Stanford, 1929	National City	S.Engr. 185+56	108 Branner-*2307*
Kimball, Marshall Jerome A.B., Stanford, 1929	Richmond	S.Engr.80·107+39	109 Sequoia
Kimberlin, Dorothy Emilee	Sacramento	S.Biol. 6·143+61	Al. Omi. Pi-*1367*
[4]Kime, Harold Clark A.B., Culver-Stockton, 1925	Pasadena	Educ. gr.	534 Guinda, P-p
Kimpton, Lawrence	Kansas City, Mo.	LD 94+155	236 Branner-*1714*
[4]Kincaid, Mary-Joseph	San Antonio, Tex.	Cl.Lit. ‡ 13+5	408 Laurel, P-p
King, Albert A., Jr.	Tacoma, Wash.	Pol. S. 93·46+65	433 Encina-*2584*
[12]King, Clarence Van H. A.B., Stanford, 1927	San Francisco	Law gr.	Chi Psi-*1648*
King, Lionel Bayley A.B., Stanford, 1929	San Francisco	Mil.S. 5·175+13	Chi Psi-*1648*
[27]King, Perry Stanley	Crockett	LD 40·42+26	East Palo Alto
King, Robert Wade A.B., Stanford, 1929	Lima, Ohio	Bact. 180+68	114 Encina-*1363*
[1]Kingsbury, Gibson Church	Carmel	LD 40–18	Zeta Psi-*B*
[12]Kinkead, David	Palo Alto	LD 27–9	363 Melville, P-p
[12]Kinkead, James Alan, Jr.	Palo Alto	S.Engr. 127+6	363 Melville, P-p
Kinkead, Robin A.B., Stanford, 1929	Palo Alto	Fr. 17·163+63	363 Melville, P-p
Kinne, Geraldine S.	St. Louis, Mo.	LD 95+28	Delta Gamma
[14]Kinoshita, Arthur Yagoro A.B., College of the Pacific, 1927	Stockton	Econ. gr.	Japanese Club-*598*
Kinsman, Jean	Yorba Linda	Math. 77·60+41	373 Roble-*2553*
[5]Kirby, Marshall	Beverly Hills	Phil. 146+172	209 Branner-*121*
¶Kirkpatrick, Leonard Henry A.B., Stanford, 1929	Taft	Fr. 180+215	219 Ramona, P-*1081*
[5]Kirkwood, Robert Carter	Palo Alto	Econ. 113+89	Phi Gamma Delta
*[12]Kistler, Samuel Stephens A.B., Stanford, 1921, Engineer, 1922, Ph.D., 1929	Stockton	Chem. gr.	641 N. Regent, S-s
[1]Kistner, Frank Benton	Portland, Ore.	LD 35–44	611 Waverley, P-p
Kitagawa, Frank Kazumasa	Los Angeles	LD 35–17	Japanese Club-*598*

Kitasako, Kenzie	Palo Alto	Econ. 132+8	848 Ramona, P-p
Klabau, Theodore	Newton, Kans.	S.Engr. 145+24	Sigma Chi-*628*
Klein, B. Dudley	Brooklyn, N.Y.	Econ. 105·36–1	508 Encina-*1237*
[4]Klein, Joseph Robert	San Bernardino	Germ. ‡	657 Channing, P-p
[4]Klein, Paul Eugene Ph.B., Chicago, 1920	San Diego	Educ. gr.	657 Channing, P-p
Klein, Russell Ronald	San Francisco	LD 44+64	444 Encina-*711*
Kleinbach, Henry	Glendale	LD 57+5	204 Encina
Kline, David I.	Visalia	Pol.S.130+56	Delta Tau Del.-*1363*
Kline, Frederick Thomas A.B., Stanford, 1929	Visalia	Pol.S. 180+108	224 Toyon-*1468*
[12]Klocksen, Marion Leathers A.B., Stanford, 1929	Palo Alto	Soc.S. 181+234	152 Roble-*2406*
[12]Klotz, Sergius A.B., Stanford, 1929	Jameson, Pa.	Econ. 180+61	Phi Gamma Delta
Knaebel, John B. A.B., Stanford, 1929	Washington, D.C.	S.Engr.135·53+41	227 Seq'ia-*2035*
Knapp, Francis Atherton A.B., Stanford, 1929	San Diego	Econ. 99·82+74	422 Encina-*2341*
[1]Knight, Cecil Gordon A.B., Stanford, 1929	San Leandro	Econ. 181+75	209 Sequoia
[4]Knopp, Grace A.B., Oregon, 1920	Eugene, Ore.	Span. gr.	855 Waverley, P-p
Knox, Bruce Miller	Sonora	Pol.S. 90·46–10	611 Bryant, P-*594*
Knox, John Clay	Waterloo, Iowa	Soc.S.-Jn.40·74+5	T. Del. C.-*1828*
Knox, Newton Booth	London, England	LD 95+125	214 Sequoia-*1501*
[4]Knudsen, Mary Gene A.B., College of the Sacred Heart, 1928	San Francisco	Cl.Lit. gr.	Col.Sac.Heart,MP-mp
Koch, Carl Robert A.B., Stanford, 1928, Engineer, 1929	Sacramento	E.E. gr.	313 Sequoia-*561*
Koch, Edward Francis	Flagstaff, Ariz.	S.Engr. 52·79+77	Sigma Chi-*628*
Kocher, Paul Harold A.B., Columbia, 1926; J.D., Stanford, 1929	Brooklyn, N.Y.	Law gr.	539 Encina-*2157*
[4]Koegel, Jack Payson	Portland, Ore.	LD	313 Union-*858*
Koepke, Reimers Doran	Watsonville	Pre-Med. 136+83	Al.Kp.Lam.-*658*
[5]Kokx, Russell George	Orange	Pol.S. 90·46–12	845 Waverley,P-p
[3]Kooshelevsky, Eugene Roman	Stanford	S.Engr. ‡ 0–13	553 Forest, P-*2228*
[12]Kormann, Fred Henry	Glendale	LD 68+0	Chi Psi-*1648*
[4]Kottinger, William Bradford,Jr. A.B., Stanford, 1928	SanJose	Econ. gr.	240 Embarcadero, P-p
[4]Kraemer, Mary Webster A.B., Stanford, 1897, A.M., 1917	San Diego	Cl.Lit. gr.	574 Lasuen-*525*
Krakauer, Max Fisher	Los Angeles	LD 67–5	216 Sequoia-*2694*
Kramer, Rex Willard A.B., Stanford, 1929	Pilot Rock, Ore.	Law gr.	312 Sequoia-*1278*
[4]Kranz, George Albin A.B., Montana, 1927	Sweetgrass, Mont.	Educ. gr.	521 Lasuen-*1305*
[5]Kranzthor, Gregory M. A.B., Stanford, 1926	El Paso, Tex.	Zoöl. gr.	555 Everett, P-p
[5]Kratt, Edwin Christian A.B., Linfield, 1924	Portland, Ore.	Educ. gr.	Kingscote
Krause, Robert Edwin A.B., Stanford, 1929	Long Beach	Econ. 180+50	240 Toyon-*2665*
[12]Krausi, George Bailey A.B., Stanford, 1929	Pasadena	Econ. 107·74+44	1020 Bryant,P-*22*
Krebs, Swanston Harry	Sacramento	Soc.S. 92·41–8	234 Union-*1214*
[5]Krenz, Eric C. W.	Stockton	Econ.-Ac.133+156	241Toyon-*2668*

[2]Krenz, Florence Blair — San Francisco — LD 30+45 — 172 Roble-*2533*
Kroeger, Arthur — Fullerton — LD 101+195 — 208 Sequoia-*2317*
[13]Kropp, Donald Joseph — San Francisco — Law gr. — Stanford Univ.
A.B., Stanford, 1926
Krotozyner, Elsa J. — San Francisco — Soc.S. 182+160 — 267 Roble-*1512*
A.B., Stanford, 1929
Krotser, George Raymond — Stanford Univ. — S.Engr.90·93+14 — 406 Sequoia-*1886*
[5]Krough, Edward Beverly — San Jose — Ed.-G.A. 154+100 — 300 Toyon-*12*
[2]Krumbein, William Justus — Portland,Ore. — LD 22–5 — 137 Encina
[2]Kuhn, Charles Bowman — San Francisco — LD 26+26 — 217 Encina-*1466*
Kulchar, George Victor — Oakland — Med. gr. — 2136 California, SF-sf
A.B., Stanford, 1926
Kullmann, Leonard G., Jr. — San Francisco — LD 81+38 — 214 Sequoia-*2665*
Kurtz, Jeanne Virginia — Los Angeles — Psych.132+74 — Gam. Phi Beta-*1337*
[5]Kusumoto, Niroku — Hiroshima, Japan — Pre-Med.126+87 — Japan'seClub-*598*
[4]Kyle, John Eldon — Tucson, Ariz. — Engl. gr. — 261 Hawthorne, P-p
A.B., Nebraska, 1918; A.M., Colorado State Teachers College, 1922
[14]LaBrie, Joseph Damase — Kansas City,Mo. — LD 60·21–3 — 446 Encina
LaChapelle, Paul Andrew — Los Angeles — Soc.S. 10·95+54 — Delta Upsilon
Lachele, Clarence Edward — Salem, Ore. — Chem. gr. — 115 Alma, P-p
B.S., Oregon State Agricultural College, 1922; A.M., Stanford, 1929
LaFarge, Charles Arth — Seattle, Wash. — Soc.S.-Jn. 91·89+110 — Del.Chi-*1304*
A.B., Stanford, 1929
Laidlaw, Gertrude — Sausalito — LD 84+6 — Kappa Alpha Theta
[1]Lail, James Clifford — Hollywood — LD 37–2 — El Camino Real-*1486*
Laird, William Harrison — Los Angeles — Pol.S. 110+30 — Zeta Psi-*B*
[1]LaMarsna, Fred Gibson — Taft — S.Engr. 90·22–21 — 215 Branner-*605*
[4]Lambert, Asael Carlyle — Provo, Utah — Educ. gr. — Menlo Heights-*1264*
B.S., Brigham Young, 1926, M.S., 1926
Lambert, Tom Ben — Tulsa, Okla. — LD 45+51 — 351 Encina-*2255*
[12]Lambert, Wilma Lois — Bellingham,Wash. — Soc.S. 135+243 — *326* Roble-*675*
Land, William Brooke — Oroville — LD 25·87+13 — 428 Encina-*2392*
¶Landon, Marjorie A. — Bridgeport, Conn. — Engl. 90·90+180 — 381 Roble-*64*
A.B., Stanford, 1929
Lane, Henry John — Eureka — Pre-Med. 98+27 — Phi Kappa Sigma
[2]Lane, Josephine Olga — Palo Alto — LD 90+91 — 845 Bryant, P-p
Lang, John Henry — San Mateo — LD 93+105 — 710 W. Poplar,SM-sm
[234]Lang, Richard E. — Seattle, Wash. — Law gr. — 535 Fulton, P-*1873*
A.B., Stanford, 1927
Langdon, Gordon — Piedmont — LD 36+1 — 223 Encina-*2272*
Langstaff, Clarence Heald — Pasadena — Law gr. — 324 Union-*959*
A.B., Stanford, 1928
[4]Lansburgh, Barbara Ethel — San Francisco — Fr. ‡ 15+12 — 281 Roble-*2691*
Lansburgh, Ruth Muzzy — San Francisco — Cl.Lit. 180+197 — 281 Roble-*2691*
A.B., Stanford, 1929
[2]Lapachet, Bernard Kenny — San Francisco — Pol.S. 103·38–5 — 727 Addison, P-p
Lapiere, Richard Tracy — Palo Alto — Econ. gr. — 353 Lowell, P-*2622*
A.B., Stanford, 1926, A.M., 1927
[12]Larsen, Arthur Christian — San Francisco — Mil.S. 5·133–5 — Sigma Chi-*628*
Larsen, Leonard Hans — Sanger — Phyl.-Med.90·95+69 — 543Byr'n,P-p
A.B., Stanford, 1929
[5]Larsh, Elisabeth — San Francisco — LD 77+95 — Delta Delta Delta-*1325*
[4]Larson, Benjamin Edward — Roseburg,Ore. — Educ. gr. — 718 Bryant, P-p
B.S., Linfield, 1923
[12]Larson, Gretchen — Los Angeles — Educ. 78·59+16 — 232 Roble-*2223*
[12]Larson, Lester Eliot — Story City, Iowa — Econ. 93·89+16 — 202 Sequoia-*1921*
A.B., Stanford, 1929

Larson, Norman Grant — Berkeley — S.Bus. gr. — Phi Kappa Psi
A.B., Stanford, 1928
[2,5]Lasell, Don W. — Lodi — S.Engr. 125+36 — 111 Toyon-*1553*
Lash, Lawrence Aubrey — Rialto — Mil.S. 5·179+106 — 215 Toyon-*141*
A.B., Stanford, 1929
[5]Lasley, Frank Robert — Pasadena — Econ. 133+30 — Phi Kappa Psi
[1]Lathrop, Howard Beecher, Jr. — San Jose — Geol. 90·41–26 — AlphaKp.Lam.-*658*
[4]Latta, Robert Smith — Hastings, Neb. — Educ. gr. — 240 Toyon
A.B., Hastings, 1927
[2,3,4]deLaubenfels, Max Walker — Pacific Grove — Zoöl. gr. — Pacific Grove-pg
A.B., Oberlin, 1916; A.M., Stanford, 1926
Laubersheimer, Anton — Los Angeles — Pre-Med. 131+26 — Chi Psi-*1648*
Laudenslager, Frederic Henry — Newark — Econ. 140+49 — Newark-n
[2,3]Laughlin, Robert James — San Francisco — LD 30+8 — 450 Encina-*612*
Lauritzen, John Barker — Salinas — Soc.S. 185+190 — Alpha Delta Phi-*J*
A.B., Stanford, 1929
[2,3,4]Lava, Horacio Clemente — Balara, P.I. — Econ.-Acct.gr. — 801 Waverley, P-p
B.S., Philippines, 1926; A.M., California, 1928
Lawler, Philip Wendell — Gardena — Med. gr. — 2404 Clay, SF-sf
A.B., Southern California, 1925
[4]Lawrence, Anna Trask — Ponca City, Okla. — LD ‡ 1129 Parkinson, P-Bx 805, p
[4]Lawrence, Arta Frances — San Jose — Educ. gr. — 310 Roble-*1845*
A.B., Washington, 1925
[4]Lawrence, William D. — Oakland — Educ. gr. — 260 Toyon
A.B., Stanford, 1927
Lawry, Edwin Vance — Palo Alto — LD 87+25 — 1129 Cowper, P-p
Lawry, George Voris — Palo Alto — LD 46·47–10 — 1129 Cowper, P-p
[1,4]Lawshe, Henry Francis — Palo Alto — Phil. 104+25 — 433 Melville, P-p
Lawson, Stanley King — Wheeling, W. Va. — Law gr. — 531 Hawthorne, P-p
A.B., West Virginia, 1927
Laykin, John Jacob — Los Angeles — Law gr. — 202 Union
A.B., California, 1924; J.D., Stanford, 1929
Lazar, George Albert, Jr. — San Diego — Pol.S. 46·90+87 — 137 Toyon-*556*
Lazarus, Lawrence Henry — Los Angeles — Chem. gr. — 741 Addison, P-*1793*
A.B., Stanford, 1928, A.M., 1929
[4]Lazarus, Ralph Edward — Los Angeles — LD — 111 Toyon-*1793*
Leach, Charles Wendell — Los Angeles — Med. gr. — 2693 22nd, SF-sf
A.B., Southern California, 1927
Leachman, Frances Marian — Vallejo — Pol.S. 132+53 — Chi Omega
Lean, Richard Gerichs — San Jose — Econ. 136+200 — Al.KappaLam.-*658*
[1]Leavitt, Newton A. — San Francisco — LD 85+47 — 419 Alma, P-p
Lechich, George Paul — Hermon, N.Y. — LD 48–9 — Governors Ave.-*1125*
Lee, Barbara — Oakland — Econ. 181+218 — Alpha Phi-*1387*
A.B., Stanford, 1929
[4]Lee, Charles Henry, Jr. — Hollywood — LD — 224 Toyon-*923*
Lee, Frank Barstow — Berkeley — S.Engr. 11·132+33 — 758Wvrly.,P-p
Lee, Green Moren — London, Ky. — LD 90+134 — 310 Sequoia-*1290*
Lee, Harry Anderson — Santa Monica — LD 41·56+11 — 446 Encina-*1791*
Lee, James Fletcher — Hollywood — Econ. 180+123 — 604 Gilman, P-*1108*
A.B., Stanford, 1929
Lee, John, Jr. — Palo Alto — Econ. 181+2 — Beta Theta Pi-*1335*
A.B., Stanford, 1929
[5]Lee, John Baker, Jr. — South Pasadena — Econ. 119+137 — Chi Psi-*1648*
[2,3]Lee, Lewis C. — Auburn — LD 54–11 — 108 Sequoia-*912*
Lee, Mary — Palo Alto — Educ. 180+92 — Alpha Phi-*1387*
A.B., Stanford, 1929
[3,4]Lee, Wellington Y.C. — Shanghai, China — Econ. gr. — 942 Ramona, P-p
A.B., China National University, 1928

[12]Lees, Fred Edward	Ontario, Ore.	LD 22–22	247 Encina-*1993*
Leet, Norman Benjamin	Oakland	Med. gr.	2136 California, SF-sf
A.B., California, 1925			
Leggett, Elizabeth Marion	Menlo Park	LD 42+0	M'loP'k-RFD,Bx391,mp
[4]Lehan, James Baird	Durango, Colo.	Pol.S. gr.	538 Lasuen-*2398*
A.B., Colorado State Teachers College, 1927			
[4]Lehman, Ernest Gray	Molalla, Ore.	LD ‡	135 Toyon-*893*
Lehmann, Mathew	Oxnard	LD 16·65+0	Kingscote
[4]Lehmann, Otto Lee	Taft	Hist. gr.	202 Toyon
A.B., California, 1926			
[5]Lehr, John William	Los Altos	Hist. gr.	Theta Delta Chi-*1828*
A.B., Stanford, 1929			
Leib, Charles Bennett	San Jose	LD 46+41	217 Encina-*1116*
Leib, Mary Sandilands	San Jose	LD 45+72	378 Roble-*1822*
Leib, Samuel Franklin	San Jose	LD 48+9	217 Encina-*1116*
[5]Leicester, Henry Marshall	San Francisco	Chem. gr.	207 Union-*1522*
A.B., Stanford, 1927, A.M., 1928			
Leistner, Mary Louise	Stockton	LD 44+43	379 Roble-*2374*
Leiter, John Arthur	Portland, Ore.	Law gr.	319 Union
A.B., Stanford, 1927, J.D., 1929			
[5]Leiter, Ruth Gifford	Portland, Ore.	Soc.S. 168+48	Alpha Omi. Pi-*1367*
[5]Leland, Hugh Hamilton	Ottawa, Ill.	Econ. 120+16	Theta Del. Chi-*1828*
[4]Leland, Raymond B.	San Jose	Educ. gr.	432 S. 12th, SJ-sj
A.B., Iowa State Normal School, 1907			
Lemmon, Allen Bosley, III	Palo Alto	S.Engr. 138+62	1116 Ramona, P-p
Lemmon, Dwight Moulton	Palo Alto	LD 47+61	1116 Ramona, P-p
[12]Lemon, Edgar Thomas	Los Angeles	LDsp.45–11	727Columbia, M-*2611*
Lentz, Wallace Gilbert	Missoula, Mont.	M.E. gr.	216 Sequoia-*715*
A.B., Stanford, 1926			
Leonard, Burrel	Cupertino	LD 96+87	Cupertino-Box 127, c
Leonard, Curtis Bernard	Balboa	Educ. gr.	325 Union-*142*
A.B., Stanford, 1925			
[3]Leong, Bing Chew	San Francisco	LD	Chinese Club
Leonhardt, J. Alfred	Covina	S.Engr. 114+6	Theta Xi
Lercari, David Joseph	Calistoga	LD 43+22	348 Encina-*2118*
Lerrigo, Frank Charles	Topeka, Kans.	Law gr.	309 Union-*565*
A.B., Stanford, 1928			
Letroadec, Walter Emile	Burlingame	Econ. 129+153	317 Sequoia
[4]Le Van, Edna Aileen	Bakersfield	Engl. gr.	217 Roble
A.B., California, 1926			
Leverenz, Humboldt Walter	Paso Robles	Chem. 139+165	Sig. Al. Eps.-*1305*
Levi, Leon Herman	Los Angeles	Law gr.	358 Encina-*2003*
A.B., Stanford, 1928			
Levin, John Milton	Seattle, Wash.	Econ. 135+101	Kingscote
Levin, Robert Louis	San Francisco	Econ. 22·109+48	142 Toyon-*2147*
[23]Levis, William Kent	Selma	Pre-Med.93·71+33	526Encina-*1431*
[234]Levit, William Harold	San Francisco	Law gr.	319 Union-*1187*
A.B., Stanford, 1928			
[12]Levitt, Jack	San Francisco	Econ.48·139+24	900 Waverley,P-p
A.B., Stanford, 1929			
Levy, Adolph Haffenberg	Los Angeles	Law gr.	759 Middlefield, P-*2531*
A.B., Stanford, 1928			
[4]Levy, Bert Harold	Oakland	LD ‡	215 Toyon
Levy, Maurice, Jr.	Los Angeles	LD 46+44	130 Encina-*2531*
[3]Lewis, Charles Philip	Lakeport	Soc.S. 90·15+6	310 Toyon-*734*
Lewis, Douglas Batchelder	Atherton	Econ. 170+1	Beta Theta Pi-*1335*
[4]Lewis, Earl Leonard	San Francisco	LD	424 Seneca, P-*1275*

[4]Lewis, Hazel M.	Bellingham, Wash.	LD ‡ 50+78	263 Roble
Lewis, John Hamilton	Winters	LD 79+29	Theta Delta Chi-*1828*
[5]Lewis, Lawrence Delbert	Portland, Ore.	Soc.S.165+33	Delta Tau Del.-*1275*
Lewis, Marian Winsor	Los Angeles	LD 44+57	182 Roble-*2766*
Lewis, Peter Delancey	Menlo Park	LD 42+8	123 Encina
Lewis, Ralph Charles A.B., Occidental, 1926	San Francisco	Med. gr.	2321 Sacramento, SF-sf
Lewis, Rhoda Valentine A.B., Stanford, 1927, J.D., 1929	Honolulu, T.H.	Law gr.	351 Roble-*2774*
[1]Lewis, Richard Field	Piedmont	LD 78+52	432 Encina
Lewis, Robert Porter	Phoenix, Ariz.	LD 93+61	Beta Theta Pi-*1335*
[4]Lewis, Wesley Ph.B., Chicago, 1921; A.M., Southern California, 1926	Los Angeles	Engl. gr.	1054 College, P-p
[1]Lewis, William Terrell	San Francisco	S.Engr. 99–19	Theta Xi
[1]Ley, John Charles	Yreka	Span. 90·6–15	405 Kipling, P-p
[5]Ley, Marjorie Marie	Hollister	Math. 90·32+59	208 Roble-*1124*
[5]Li, Charles	Kwangsi, China	Educ. 90·47+13	Chinese Club-*663*
Li, Chih Min A.B., Ohio State, 1927	Honan, China	Pol.S. gr.	Chinese Club-*2556*
[1]Li, Mo Ch'ih	Hunan, China	S.Engr. 90·	520 Salvatierra-*1663*
[1]Li, Tao Hsuan A.B., Stanford, 1929	Shensi, China	Educ. 90·105+3	835Wvley.,P-*1143*
Li, Wen-Pang B.S., Illinois, 1928	Canton, China	C.E. gr.	Chinese Club-*1637*
[4]Lienkaemper, Gertrude B.S., Oregon State Agricultural, 1921	Seattle, Wash.	Germ. gr.	Madroño
[4]Lighton, Edward W. A.B., New Mexico, 1922	Albuquerque, N.M.	Educ. gr.	707 Addison, P-p
Likens, George Barry	San Francisco	Econ. 112+66	302 Sequoia-*80*
Lilienthal, Ernest R.	San Francisco	LD 76+56	235 Toyon-*117*
Lillard, Richard Gordon	Sacramento	Engl. 90·53+64	315 Sequoia-*941*
Lillie, Raymond Fell A.B., Stanford, 1929	Mayfield	Germ. 184+176	530 Lytton, P-p
Lilly, John Arthur	Balboa	Econ. 136+121	460 Oberlin, M-*545*
[23]Lilly, Robert Tompkins	Balboa	Econ. 125–3	460 Oberlin, M-*1385*
[4]Linda, Esther Bernice A.B., Fresno State Teachers College, 1928	Kingsburg	Educ. gr.	236 Roble
[4]Lindahl, Glenn Wilbert B.S., Kansas State Teachers College, 1928	Munden, Kans.	Educ. gr.	1680 Cambridge, M-*576*
[24]Lindahl, Viva May A.B., State College of Washington, 1916	Deer Park, Wash.	Educ. gr.	Madroño
[4]Lindblom, Claus Eugene A.B., San Jose State Teachers College, 1927	San Jose	Educ. gr.	203 Union
[1]Linden, John F.	San Mateo	Econ.‡16–8	HillsboroughBlv.,H-h
Linden, Leonard Robert	Hillsborough	LD 96+36	HillsboroughBlvd.,H-h
[5]Lindenmayer, J. Edward	Menlo Park	Pre-Med.101·22–12	M'lo P'k-*1276*
Linderholm, Evelyn Bernice A.B., Stanford, 1929	Menlo Park	Math. gr.	312 Partridge, MP-mp
[4]Lindner, Milton Jerome	Fresno	S.Biol. ‡	210 Granite, PG-pg
[23]Lindow, Jack Henry	San Francisco	Econ. 90·30+6	Phi Sig. Kappa-*538*
[1]Lindsay, Charles Hunter	Evanston, Ill.	LD 57–5	Delta Tau Delta-*1363*
Lindsay, Thomas Irwin A.B., Stanford, 1929	San Jose	Econ. 195+220	139 Toyon-*870*
Lindsley, Fred Van Sant	Hollywood	LD 44+19	400 Encina-*1602*
Lindstrom, Charles W.	Tacoma, Wash.	LD 47+47	401 Encina-*1767*
[1]Line, George De Witt	Palo Alto	LD 10·38–19	252 Toyon-*990*

Lingenfelter, Daniel J. A.B., Occidental, 1928	N. Hollywood	Med. gr.	201 Union-*1992*
[12]Linley, John T.	Azusa	LD 43–35	Alpha Delta Phi-*J*
Linneman, Lawrence M. A.B., Stanford, 1925, J.D., 1929	Watsonville	Law gr.	431 Encina
[5]Linscott, Phyllis Mar A.B., Stanford, 1929	Santa Cruz	Engl.-P.Sp. gr.	Del.Del.Del.-*1325*
[5]Linse, Arthur William	Palo Alto	Ec.132·42+53	1320 Middlefield,P-p
[4]Linton, Alma V.	San Jose	Educ. gr.	35 Hobson, SJ-sj
A.B., San Jose State Teachers College, 1929			
Linton, C. McClelland	Los Angeles	LD 44+37	406 Encina-*2461*
[12]Linton, Donald Crouch A.B., Stanford, 1927, Engineer, 1929	Modesto	Min. gr.	309 Sequoia-*1203*
[5]Lipman, Richard A.	Hollywood	Psych. 88·33+4	Pacific Grove-pg
Lippitt, Sidney Grant, Jr.	San Francisco	Econ. 43·83+18	113 Branner-*1026*
Lipsitch, Sidney Lawrence A.B., Stanford, 1929	Los Angeles	Econ. 182+120	214 Branner-*1149*
[23]Lissner, Aline M.	Los Angeles	LD 3·32+30	102 Roble-*673*
Lites, Arthur Presley	Mayfield	LD45+32	465Sherid'n,M-Bx754,m
[2]Littlefield, Warren W.	Stanford Univ.	Hist. 42·73+8	Sigma Nu
Littler, Robert A.B., Stanford, 1925, A.M., 1927, J.D., 1929	Palo Alto	Law gr.	151 Cowper, P-p
[5]Liu, Hsing Chin A.B., Stanford, 1929	Wuchang, China	Educ. gr.	Chinese Club-*2036*
[1]Liu, Liang Chao Graduate, Shanghai, 1928	Kiangsi, China	Econ. gr.	226 Roble-*955*
[34]Liu, Tsun Hsien A.B., Ohio State, 1927	China	Chem. gr.	Chinese Club-*1261*
[4]Livingston, Ethel	San Francisco	LD	Roble
Livingstone, John Roger	San Leandro	LD 56+15	129 Emerson, P-p
Livingstone, Stanley C.	San Diego	Econ. 125+113	Kappa Alpha
Lloyd, Paul Eugene A.B., Stanford, 1929	Los Angeles	Math. 180+113	738 Guinda, P-p
[5]Lo, Chi Jung A.B., Stanford, 1929	China	Zoöl. gr.	Chinese Club
[1]Lo, Wen Ching	Shansi, China	Psych. 90·29+6	Chinese Club-*2471*
van LöbenSels, Helen A.E. A.B., Stanford, 1929	Vorden	Educ. gr.	265 Roble-*682*
van LöbenSels, Maurits Just	Vorden	LD 45+24	308 Encina-*682*
Locke-Paddon, Cecil	Oakland	LD 45·32–11	309 Encina-*1757*
[5]Lockett, Rowena Ruth	Alhambra	LD 75+30	Delta Gamma-*1366*
Loe, Harris Davis A.B., Stanford, 1926	Denver, Colo.	Med. gr.	2180 Washington, SF-sf
[5]Loeffler, Allison Rose	Los Angeles	Econ.120+60	Al. Omicron Pi-*1367*
*Loel, Wayne Frederick A.B., Stanford, 1916, A.M., 1917	Los Angeles	Geol.gr. 812	Swy.Term.Bld,LA-la
[5]Lofland, Evelyn A.B., Stanford, 1926	Palo Alto	Educ. gr.	345 Forest, P-*2484*
Logan, Glen Earnest	Los Angeles	LD 100+45	Delta Chi-*1304*
Logan, Harry Lee	Colton	LD 48+60	327 Encina-*1984*
Logie, Ruth Murray	Phoenix, Ariz.	Engl. 43·88+26	280 Roble-*613*
[2/4]Loh, Ting Kwang A.B., National Central, 1926	Kiangsi, China	Educ. gr.	Chinese Club-*2036*
[4]Lohman, Neal Joseph B.S., Southern California, 1929	Parlier	Educ. gr.	327 Union
Lomax, Frances H.	Broken Bow, Nebr.	LD 92+45	222 Roble-*2646*
Lombardi, Frank Palmer	Culver City	LD 20–18	42 Encina-*1832*

[1]Lombardi, Louis Ernest	Reno, Nev.	Pre-Med.135·14+2	443Kipling,P-p
Long, Charlotte Jeanne	Palo Alto	LD 89+105	415 Pope, P-*566*
Long, George Irving, Jr.	San Francisco	Econ. 141+39	Kappa Alpha
[4]Long, Herbert Malcolm	San Francisco	LD	115 Toyon
[1]Long, John Townsend A.B., Stanford, 1929	Chatsworth	Law 180+95	Phi Kappa Psi-*1333*
Long, Leland Reed A.B., Stanford, 1929	Palo Alto	Engl. 86·94+45	415 Pope, P-p
[124]Long, William Glenn A.B., Louisville, 1926	Irwin, Pa.	Psych. gr. 1095	Ashby, P-Bx683,p
Lonon, Malcolm Sinclair	Crockett	Econ. 141+73	611 Waverley, P-p
Loofbourow, Robert Lincoln A.B., Stanford, 1929	Berkeley	Geol.199+234	1492 Via Palou-*2158*
Loomis, J. Vard	Arroyo Grande	LD 83–3	231 Branner-*2665*
[4]Loop, Mabel Frances A.B., Stanford, 1915, A.M., 1916	Redondo	Engl. gr.	534 Lasuen
[4]Loud, Katherine B. A.B., Pomona, 1925	Mills City, Mont.	Educ. gr.	583 Lagunita-*1918*
Lovelace, Robert Reed	Dinuba	LD 78+35	316 Sequoia-*1118*
[5]Low, Duncan Douglas	Palo Alto	Soc.S. 110+147	Palo Alto-Bx741,p
Low, John Stewart A.B., Stanford, 1928	Berkeley	E.E. gr.	305 Union-*60*
Lowe, Kales Eldon	San Francisco	LD 46+9	117 Encina-*1055*
Lowe, Pardee	Oakland	Econ. 154+142	11 Toyon-*2347*
[2]Lozano, Marion Thais	Reno, Nevada	Pol.S.4·177+113	Delta Gam.-*1366*
[3]Lubowski, Alfred Heinrich Ph.D., Berlin, 1926	Los Gatos	Educ. gr.	Montezuma, LG-lg
[4]Lucas, Carl Dunn	Los Angeles	LD	140 Toyon
[2]Lucas, Russell Stillwell	Richmond	LD 29+33	336 Encina
[2]Luce, Erma C. A.B., Stanford, 1926	San Francisco	Educ. gr.	Kappa Alpha Theta
Luce, Raymond Frederick	San Francisco	LD 90+7	Sigma Alpha Eps.-*1305*
Lucy, Frank Allen A.B., Stanford, 1929	Palo Alto	Chem. 187+87	460 Homer, P-p
Lucy, Richard Francis	Palo Alto	LD 88+57	460 Homer, P-p
[4]Ludeke, Frederic Sebastian A.B., Stanford, 1924	Fresno	Law gr.	322 Union
[6]Lui, Ralph Thomas	Napa	LD 75+69	230 Branner-*1982*
Lumb, Thomas R. A.B., Stanford, 1929	Campbell	Chem. gr.	303 Sequoia
[4]Lundell, Euarda A.B., San Jose State Teachers College, 1927	San Jose	Educ. gr.	836 S. 9th, SJ-sj
[4]Lundy, Bessie Naomi A.B., College of the Pacific, 1922	San Jose	Educ. gr.	1226 Yosemite, SJ-sj
[1]Lundy, Frank Arthur A.B., Stanford, 1928	Hollywood	Law gr.	539 Encina-*2159*
[134]Lundy, Robert Floyd A.B., Stanford, 1928	San Jose	Econ. gr.	204 Encina-*998*
[4]Lunt, Charlotte Madeline	Los Altos	Hist. ‡	Los Altos-la
Lusignan, Frank Walter A.B., Stanford, 1928	Stockton	Med. gr. 2180	Washington, SF-sf
[5]Luther, Chester Francis A.B., Stanford, 1928	Auburn	Math. gr.	9 Union-*2714*
Luttrell, Emmet W. A.B., Stanford, 1929	Yreka	Econ. 187+115	103 Sequoia-*2602*
Lyell, Herbert Leslie	Palo Alto	LD 46·44+26	225 Emerson, P-p
[1]Lyman, C. Ralph	Los Angeles	LD 45–11	Alpha Delta Phi-*J*

Lyman, Willis Theodore A.B., Pomona, 1928	Long Beach	Law gr.	302 Union-*621*
Lynch, Elizabeth Ann	San Francisco	Engl.-P.Sp.30·137+116	Kp.A.The.
[1]Lyon, Arthur Hudson, Jr. A.B., Stanford, 1929	Santa Ana	Econ.123·58+12	511Hnovr.,M-*737*
[5]Lyon, Carl Andrew	Los Altos	Econ. 24·47+14	Los Altos-Bx 15,la
[1]Lyon, Ezra Clay	Idaho Falls, Idaho	LD 4–12	357 Encina-*1861*
Lyon, Frederick William	Los Angeles	LD 37–23	329 Encina-*1593*
Lyon, Harry Tom	Idaho Falls, Idaho	LD 44–1	357 Encina-*1861*
Lyon, Joyce Cowling	Burlingame	Soc.S.163+197	Sigma Kappa-*1327*
[1]Lyons, John Collum	Los Angeles	LD 29·68–5	Delta Tau Delta
Lyster, Russell Withenbury	Los Angeles	Pre-Med.40·135+16	324 Un'n-*1120*
McAfee, William Arthur	Palo Alto	LD 91+41	155 Tasso, P-p
[5]McAllister,Sumner Hatch A.B., Stanford, 1929	StanfordUniv.	Chem. gr.	260 Toyon-*605*
McAnaw, John T.	Cincinnati, Ohio	Pol.S.98·44+42	414Emrsn.,P-*1813*
[23]¶McAnear, Beverly A.B., Stanford, 1929	Sacramento	Hist. 180+265	22 Branner
MacBeth, Norman	Los Angeles	LD 45+49	315 Encina-*2256*
[4]McBride-Cole, Maidie	Pasadena	Educ. ‡	475 Forest, P-p
McCabe, Jane Graham A.B., Stanford, 1929	Santa Barbara	Fr. 9·183+122	Delta Gamma-*1366*
McCaffery, Joe James, Jr.	Butte, Mont.	Pol.S. 114·52+5	Del.Tau Del.*1363*
[5]McCall, Elizabeth Fluhrer A.B., Stanford, 1927	Visalia	Educ. gr.	Chi Omega
[234]McCallum, William J.	Salinas	LD107+22	StanfordCourt,MP-mp
McCambridge, Thomas Geo. A.B., St. Mary's, 1928	Ocean Park	Law gr.	275 Hamilton, P-p
McCandless, John Bole	Los Angeles	Econ. 150+1	Delta Kappa Epsilon
[4]McCardle, May Rebecca A.B., Fresno State Teachers College, 1925	Fresno	Educ. gr.	454 Hamilton, P-p
McCarthy, Francis Joseph	Fairoaks	LD 19+1	201 Encina-*672*
McCarthy, Alexia Helen A.B., Stanford, 1929	San Francisco	Engl. 180+97	Pi Beta Phi-*1918*
McCaughna, Frank A.	Los Angeles	Econ. 42·89+9	Kappa Sigma-*1326*
[4]McCausland, Harriet Rosa-Lee A.B., Stanford, 1917, A.M., 1927	Palo Alto	Engl. gr.	1419 Byron, P-p
[5]McClatchie, Winifred Lovisa A.B., Stanford, 1929	Palo Alto	Chem. gr.	1126 Hamilton, P-p
[23]McCleave, Constance H.	Berkeley	LD 28+17	275 Roble
McCleave, Mary Trowbridge	Berkeley	Psych. 130+52	Gam.Phi Beta-*1337*
McClendon, M. Earl A.B , Whittier, 1927; M.B.A., Stanford, 1929	Midlothian, Tex.	S.Bus. gr.	235 Union-*1201*
McClintock, John Chamberlain	Altadena	Hist. 138+191	541 Salvatierra-*877*
McClintock, Robert Mills	Altadena	Hist. 142+256	541 Salvatierra-*877*
McCloskey, Thomas W.	Terra Bella	LD 51·47+44	209 Encina-*1827*
McClure, William Henry	Eureka	LD 44+0	321 Encina-*1582*
[4]McCollister, Richard H.	San Mateo	LD 52–14	557 Hamilton, P-p
[4]McCollom, Ivan N.	Ellensburg, Wash.	Educ. ‡	251 Toyon-*1236*
[1]McCone, Alan Ivins	Haddonfield, N.J.	LD 46·41+22	Phi Kappa Psi-*1333*
[23]Maccono,Francis Joseph	Mountain View	S.Engr.115·31+5	869Dana,MV-mv
McCormack, Douglas Hamilton	Rio Vista	Econ. 143+92	305 Branner-*2437*
[4]McCormack, Wallace	Rio Vista	LD	23 Toyon-*571*
[4]McCormick, Ernest L.	San Francisco	LD	119 Toyon
McCormick, Manson Fielding	Fresno	LD 96+116	136 Toyon-*1468*

[12]McCormick, Paul Daniel A.B., Stanford, 1929	S. Pasadena	Pol.S. 91·89+64	Phi Gamma Delta
McCoy, Claudius Thomas	Twin Falls,Ida.	LD 45+32	202 Encina-*685*
McCoy, Frank Valjean	Orange	LD 43–3	110 Encina-*1158*
McCuen, Theron Lewis A.B., Stanford, 1928, A.M., 1929	Palo Alto	Educ.gr. 144	Rincon'da,P-Bx341,p
[1]McCullough, George Burns A.B., Stanford, 1927, Engineer, 1929	Reno, Nev.	M.E. gr.	528 Encina-*1581*
McCullough, James Y.	New Albany, Ind.	LD 90+68	241 Hawthorne, P-p
McCully, Henry Howard	Palo Alto	LD 48·38+7	1035 Bryant, P-p
[12]McCurdy, Lee Hicklin A.B., Stanford, 1929	Banning	Econ. 62·124+55	129 Branner-*1632*
McCurdy, Richard Clark	Pasadena	S.Engr.119+52	BetaTheta Pi-*1335*
McDermott, Allan Ludwick	Santa Ana	LD 93+63	Delta Upsilon
McDermott, John Carson A.B., Stanford, 1927	San Francisco	Med. gr.	2180 Washington, SF-sf
[5]McDermott, William C.	Los Angeles	Psych. 162+16	200 Branner-*1289*
[234]McDonald, Hovey Clyde A.B., San Jose State Teachers College, 1928	San Jose	Educ. gr.	4473 Alum Rock, SJ-sj
MacDonald, Russell Degan	S. Pasadena	LD 42+12	227 Encina-*1912*
[12]McDougall, John A.	Portland, Ore.	S.Engr. 95·46–6	218 Toyon-*2403*
McDougall, Kenneth Raymond A.B., Stanford, 1927, J.D., 1929	Palo Alto	Law gr.	1290 Univ'sity,P-Bx321,p
[12]McDougall, Margaret E.	Santa Barbara	LD 18–23	382 Roble-*1846*
[5]McDowell, Carl Elliott	Los Altos	Pol.S. 79+96	250 Branner-*131*
[5]McDowell, John Ezra, Jr.	Los Altos	Hist. 135+68	Los Altos-Bx 184,la
McDowell, Martha Clift	Palo Alto	Hist. 136+196	350 Addison, P-p
McDowell, William Peirce	Palo Alto	LD 40·61–9	350 Addison, P-p
McDuffie, M. Scott	Los Gatos	Econ. 122+9	115 Toyon-*1855*
McElfresh, Francis Henry, Jr. A.B., Pomona, 1926; M.B.A., Stanford, 1929	Orange	S.Bus. gr.	235 Union-*1202*
McElvenny, Ralph T. A.B., Stanford, 1928	Salt Lake City,Utah	Law gr.	400 Colorado, P
McElwain, Lester Stafford	Burlingame	LD 79+43	1537 Burlingame, B-b
[4]McFadden, Loren E. A.B., Colorado State Teachers College, 1918;	Palo Alto	Educ. gr. A.M., Nevada, 1926	628 Webster, P-p
McFadden, Ysidora L. A.B., Stanford, 1929	Placentia	Span. 180+76	253 Roble-*1673*
McGarr, Arthur F.	Muskogee, Okla.	LD 94+81	244 Toyon-*616*
McGarry, John Louis	Chicago, Ill.	LD 26–1	200 Encina-*1697*
[2]MacGavin, Helen	San Francisco	LD 4–14	306 Roble
[4]MacGinitie, Harry Dunlap A.B., Fresno State Teachers College, 1926	Arcata	Phys. gr.	Ventura-v
McGinn, Barbara Ruth A.B., Stanford, 1929	Bakersfield	Bact. 90·90+73	262 Roble-*2605*
[12]McGonigle, Lawrence E. A.B., Stanford, 1929	Los Angeles	Chem. 182+192	Phi Kappa Psi
[4]McGrath, Lawrence Philip B.S., Illinois, 1921; A.M., Harvard, 1926	Chicago, Ill.	Econ. gr.	University Hotel, P-p
McGrath, Michael W.	Silver City, N.M.	Span. 55·82+32	Delta Upsilon
MacGregor, V. Claire A.B., Stanford, 1929	Great Falls, Mont.	Engl.-P.Sp.96·89+65	A.O.P.-*1367*
[4]McGuffin,DorothyMelville	SanFrancisco	Educ. ‡	442 Guerrero, SF-sf
[4]McGuire, Bess	Pasadena	Educ. ‡	Roble-*584*
[12]McGuire, Thomas Grant A.B., Stanford, 1928	Santa Rosa	S.Bus. gr.	Phi Delta Theta
McHugh, Robert A. A.B., Stanford, 1929	Baraboo, Wis.	Econ.69·119+3	1007 ForestCt.,P-p

[4]McInerney, Leonora C. San Francisco Educ. gr. 751 Channing, P-p
A.B., San Francisco State Teachers College, 1925
McInerny, Richard F. San Bernardino Law gr. 303 Union-*1052*
B.S., Columbia, 1927
[4]McIntosh, Zita Stahle Los Gatos Educ. ‡ 455 Forest, P-p
[4]McIntyre, Fanny Beckham San Diego Educ. gr. 209 Roble
A.B., San Diego State Teachers College, 1925
McIsaac, Robert Lyle Parkdale, Ore. Econ. 135-47+0 Sigma Chi-*628*
A.B., Stanford, 1929
Mack, Henry Pitts San Diego Law gr. 211 Sequoia-*1451*
A.B., Stanford, 1928
[12]Mack, John Erick Pasadena Law gr. Phi Kappa Psi-*1333*
A.B., Stanford, 1926
[1]Mack, Reba Galvin Sacramento Engl. gr. Harker's School, P-p
A.B., Stanford, 1910
[1]McKay, Hammel D'Roche Durham LD 59+34 Theta Chi-*2683*
McKee, George Washington Placerville LD 70+27 250 Toyon-*1855*
McKell, David San Francisco LD 67+1 133 Toyon-*1781*
McKellip, Robert Palo Alto Econ. 134+17 Phi Delta Theta
McKelvey, John Fairchild Suffern, N.Y. LD 42+21 330 Encina-*733*
McKenney, John Paul. Oakland Pre-Clin.135-50+35 *229* Union-*31*
A.B., Stanford, 1929
[4]McKenzie, Ellen Margaret Mt. View Fr. gr. Mt.View-RFD, Bx206,mv
A.B., California, 1924
MacKenzie, William Russell Los Angeles LD 43+15 139 Encina-*2168*
McKeown, David Theodore Gresham,Ore. Econ. 180+10 Sig.Alpha Eps.-*1305*
A.B., Stanford, 1929
[4]McKey, Frederic William Los Angeles LD Menlo Park-mp
[234]McKiernan, Charles Henry San Jose Hist. 135-29+26 48 N. 8th, SJ-sj
McKinnon, Alex Michael Los Angeles C.E. 180+38 Delta Upsilon
A.B., Stanford, 1929
MacKinnon, Donald Stuart Long Beach Med. gr. *2323* Sacramento, SF-sf
A.B., Pomona, 1926
[12]Mackintosh, William Erwell San Diego Chem. 40-117+48 126 Branner-*661*
[5]McKnight, Charles Galen Merced Law gr. *230* Union-*1342*
A.B., Stanford, 1928
[12]McKnight, Eugene Chauncey San Diego Phil. 181+207 212 Toyon-*1431*
A.B., Stanford, 1929
McLaren, Matie San Francisco Engl. 160+61 Delta Gamma-*1366*
McLaughlin, Andrew C. San Francisco LD 44–20 135 Castilleja, P-p
[5]McLaughlin, James Orr Palo Alto Educ. gr. 166 Bryant, P-p
A.B., Grove City, 1905, A.M., 1907
[4]McLean, Anna Rosamond Adrian, Mich. Math. gr. 430 Kingsley, P-p
A.B., Mississippi, 1927
McLean, Corbett Portland, Ore. E.E. gr. 547 Encina-*2377*
A.B., Stanford, 1927, Engineer, 1929
[4]McLean, George Alonzo Adrian, Mich. Psych. gr. 430 Kingsley, P-p
A.B., Mississippi, 1926; A.M., Boston, 1928
[23]McLean, Sinclair Santa Rosa LD 23–8 333 Encina-*1283*
[4]McLeish, Jessie Santa Clara Engl. gr. 1707 Liberty,SC-sc
A.B., College of the Pacific, 1924
McLeod, Norman Agnew Los Angeles LD 86+46 Beta Theta Pi-*1335*
[1]McLeod, Norman John Pomona Hist. gr. 850 Palo Alto, P-p
Ed.B., California at Los Angeles, 1924
[5]McMasters, John Herbert Taft Geol.90-48+73 465ShdnM-Bx754,m
[12]McMath, Richard Burroughs Piedmont LD 45-45+39 *423* Encina-*2372*
[124]McNamara, Thad Maria Bakersfield Pre-Med. 84–5 Delta Kappa Eps.

McNamee, Frank Las Vegas, Nev. Law gr. 585 Salvatierra
A.B., Stanford, 1927, J.D., 1929
McNaught, James Bernard San Francisco Med. gr. 2180 Washington, SF-sf
A.B., Kansas, 1917, A.M., 1917
McNaught, Robert C. San Francisco Med. gr. 2979 Lake, SF-sf
A.B., Stanford, 1927
MacNaughton, Boyd Portland, Ore. Hist. 135+139 228 Branner-*1468*
[5]McNemar, Quinn Keyser, W.Va. Psych. gr. 221 Bryant, P-p
A.B., Juniata, 1925
Macomber, Freeman Glenn Milan, Wash. Educ. gr. Menlo School, MP-mp
A.B., Washington, 1926
McOmie, Lorenzo Mark Los Alamitos Econ. 90·51+45 435 Encina-*2257*
[4]McPhail, Roy Kenneth Hollister LD 139 Toyon
[3]McPherson, John Clarke Portland, Ore. S.Engr. 104+26 659 Salvatierra
[4]Macpherson, William A. San Diego Chem. gr. 137 Toyon-*1223*
A.B., Redlands, 1929
MacQuiddy, T. Malcolm Watsonville Law gr. 311 Union-*862*
A.B., Stanford, 1928
McQuilling, Donald William Pasadena LD 69+19 215 Sequoia-*931*
[12]McRae, Kenneth Clarence Roseville Pol.S. 110–24 114 Toyon-*1000*
MacSwain, Josephine W. Sacramento Span. gr. Kingscote
A.B., Mills, 1928
McVey, Catharine Lawshe Palo Alto Engl. 40·147+174 433 Melville, P-p
A.B., Stanford, 1929
[5]Macy, C. Ward Cedar Rapids, Ia. Econ. gr. 1119 High, P-p
A.B., Grinnell, 1920; A.M., Iowa, 1923
Madden, Sidney Clarence Stanford Univ. Pre-Med.10·175+215 320Enc.-*1151*
Madden, Stanley J. Fresno LD 45+64 231 Encina-*1151*
Maddox, Ben, Jr. Visalia Econ. 120+57 132 Toyon-*2701*
Madieros, John Matthew San Francisco LD 80+43 205 Sequoia
Madison, Cedric Merit Lodi Econ. 142+59 Al. Kap. Lam.-*658*
[34]Madison, Ryland Randolph San Mateo Chem.64·88+17 10 9thAve.,SM-sm
Magee, J. Bruce Los Angeles S.Engr. 105·97+107 660 Wvrly., P
Magee, John Paul Huntington Park LD 84+43 Theta Xi
[5]Magnus, Jean Eleanor Los Angeles LD 32+34 343 Roble-*2405*
Maguire, Fred Bell San Francisco LD 48+47 251 Encina-*1422*
[4]Maguire, Mary Carmel Santa Rosa Engl. gr. 98 Bosworth, SF-sf
A.B., Ursuline, 1928
[1]Maguire, William Francis San Francisco Econ. 180+36 Phi Kappa Psi-*1333*
A.B., Stanford, 1929
[4]Mahakian, Gregory K. Fowler Educ. ‡ 323 Union-*542*
[3]Mahnke, Elizabeth Binkley Cobb Educ.56·130+77 847Bryant,P-*1245*
A.B., Stanford, 1929
Mahon, Edmund Joseph San Francisco Med. gr. St. Joseph's Hosp.,SF-sf
A.B., California, 1925
[5]Mahoney, Paul Boston, Mass. Pol.S. gr. 103 Branner-*2286*
A.B., Stanford, 1929
Mahoney, Rolland F. Hollywood Geol. 180+70 134 Toyon-*605*
A.B., Stanford, 1929
[12]Mahy, Andrew Xerez Compton Econ. 135·64+14 560B Forest, P-p
A.B., Stanford, 1929
Main, Margaret Aileen San Diego LD 46·47+61 312 Roble-*2324*
Mainwaring, George Frank Petaluma Bact. 180+56 540 Encina-*845*
A.B., Stanford, 1929
Makle, Albert Leonard Palo Alto LD 18·88+72 558 Forest, P-p
Malcolm, David Ralph, Jr. Van Nuys Ec.-Ac.15·129+195 242 Brnr.-*2733*
Mallory, George Henry Stanford Univ. Bot. gr. 750 Dolores-*920*
A.B., Stanford, 1920

Malmquist, Gustaf Carl — Concord — Econ. 52·83+13 — Sigma Nu-*1385*
[12]Malmquist, Lincoln Ragnar — Concord — Ed.-G.A. 145+105 — Sigma Nu-*1385*
Malnick, Irving Lawrence — Oakland — Econ. 12·168+5 — 500 Encina-*1015*
A.B., Stanford, 1929
[23]Malovos, Kenneth Richard — San Jose — Econ. 128·32+50 — 224 S. 11th, SJ-sj
[1]Maltby, Harry Lee — Long Beach — Hist. 162+7 — Delta Upsilon
Man, Sau — Canton, China — Econ. gr. — 647 Emerson,P-Bx474,p
A.B., Lingnan, 1928
Manhire, Reu Elwood — Palo Alto — LD 87+52 — 120 Kingsley, P-p
Mann, Harold William — Anaheim — Econ. 136+31 — Kappa Sigma-*1326*
Manning, Dorothy — Stanford Univ. — LD 45+76 — 649 Alvarado
[12]Manning, Ethel Marie — Ashford, England — Pol.S. gr. — 671 Santa Ynez
A.B., California, 1920; A.M., Southern California, 1926
Manning, Walter Day — San Leandro — Econ. 158+19 — 423 Encina-*582*
Mannon, Fred Wells — Palo Alto — LD 60+10 — *627* Gilman, P-p
Mannon, Martha — Ukiah — LD 83+159 — Delta Gamma-*1366*
Manor, Arnold — Oakland — LD 95+78 — 218 Sequoia-*631*
[4]Mansfeldt, Irene — San Francisco — LD — 871 Lytton, P-p
[3]Mansfield, James Verne — Palo Alto — Econ. 180+186 — 1102 Ramona, P-p
A.B., Stanford, 1929
Mansfield, Kenneth Zoellin — King City — Soc.S.-Jn.136+112 — 137 Brnr.-*1842*
[4]Maple, Adelaide Cecelia — Menlo Park — Hist.gr. — Col.SacredHeart,MP-mp
A.B., Duchesne,1919; A.M., Loyola, 1926
Marchant, William Harry — Vallejo — LD 52+22 — 317 Encina-*1200*
Marks, Eddie Harlan — Stanford Univ. — Soc.S. 167+135 — Zeta Psi-*B*
Marks, Graham Wallace — Los Angeles — Chem. gr. — 206 Union-*1531*
A.B., Stanford, 1926, Engineer, 1927
Marks, Jack S. — Stanford Univ. — LD 77+58 — Kingscote-*1021*
Marks, Max — Pasco, Wash. — LD 89+8 — 306 Sequoia-*696*
Marks, William Phillip — Burbank — LD 55+27 — *362* Encina-*2667*
[124]Marquis, Donald G. — Bellingham, Wash. — Psych. gr. — Sigma Nu-*1385*
A.B., Stanford, 1928
[234]Marquis, Jean Lilian — Bellingham, Wash. — LD 54·31+59 — *326* Roble-*2354*
Marrack, Harriet Febiger — Palo Alto — Soc.S.-Jn.180+64 — 530 Melville,P-p
A.B., Stanford, 1929
Marsh, Herbert Best — Monrovia — LD 87–12 — Phi Delta Theta
Marsh, Melbourne Derge — Hollywood — Econ. 181+149 — 209 Toyon-*2007*
A.B., Stanford, 1929
Marshall, Donald C. — Sunnyvale — Med. gr. — 2180 Washington, SF-sf
A.B., Stanford, 1925
[5]Marshall, Francis N. — N. Adams, Mass. — Law gr. — 943 Bryant, P-*2711*
A.B., Stanford, 1928
Marshall, Joseph Walden — Portland, Ore. — LD 45+15 — 229 Encina-*1862*
[5]Martens, Elise Henrietta — Berkeley — Educ. gr. — 200 Portola, P-*2466*
A.B., California, 1906, A.M., 1922
[4]Martin, Chester C. — Redondo Beach — Educ. gr. — 521 Lasuen
B.S., Miami, 1916; A.M., Columbia, 1923
[4]Martin, Daniel Jerome — Washington, D.C. — M.E. gr. — 962 Boyce, P-p
Graduate, U.S. Naval Academy, 1924
Martin, Francis Whitney — Palo Alto — Bact. 193+120 — 525 Lincoln, P-p
Martin, Hugh Ralph — Riverside — LD 44+3 — 127 Encina-*1816*
[4]Marum, Pauline Gertrude — Menlo Park — Engl. gr. — Col. Sac. Heart,MP-mp
A.B., College of the Sacred Heart, 1923; A.M., Stanford, 1925
[23]Marvin, W. Sherwood — Riverside — LD 45·25–2 — 230 Encina-*1184*
Marx, Edward Howard — Hollywood — Psych. 185+141 — Kappa Alpha
A.B., Stanford, 1929
[5]Marx, Melville — San Francisco — Econ.135+22 — 436 Waverley,P-*2435*

Mason, Lawrence Oliver — Lindsay — LD 44–3 — 136 Encina-*1682*
Mason, Lloyd Alexander — Riverside — Law gr. — 307 Union-*1472*
A.B., Stanford, 1928
Mason, Ruth — Hollywood — Soc.S. 181+136 — Kappa Alpha The.
A.B., Stanford, 1929
Mason, William A. — Hollywood — S.Engr. 45·146+44 — 604 Glmn., P-*562*
A.B., Stanford, 1929
[12]Masson, Edmond Eric — San Francisco — Fr. 180+70 — 251 Hawthorne, P-*893*
A.B., Stanford, 1929
Matfield, Dora Katherine — S. Pasadena — Pol.S. 150+113 — Pi Beta Phi-*1918*
Mather, Carl Norman — Los Angeles — Econ. 144+167 — 203 Sequoia-*1238*
[5]Matthay, F. Lowell — Los Angeles — Law gr. — 309 Union-*1*
A.B., Stanford, 1928
Matthews, Roger — San Jose — Pre-Med. 90·46+33 — Pacific Gr.-pg
[4]Mattox, Clifford J. — Ellensburg, Wash. — Educ. gr. — 538 Lasuen
A.B., Washington, 1925
[4]Maughan, Reese P. — Logan, Utah — Educ. gr. — 177 Everett, P-p
B.S., Utah Agricultural, 1927
Maurer, Paul Bulger — El Centro — LD 87+15 — 238 Toyon-*2665*
[2]Maurice, Charles S. — Eagle Springs, N.C. — Min. gr. — 662 Mirada-*2044*
A.B., Princeton, 1926
[124]Mauser, George Kern — Hollywood — Econ.97+59 — Alpha Tau Ome.-*1384*
[4]Maxwell, Mary-Ursula — Santa Rosa — Educ. gr. — 98 Bosworth, SF-sf
A.B., College of the Sacred Heart, 1923
May, John Rickard — Berkeley — LD 90+52 — Phi Kappa Sigma
[1]May, Julius — Los Angeles — LD 87–23 — 250 Branner-*2668*
[5]Mayer, Evelyn K. — Rochester, N.Y. — Econ. 111·52+56 — 176 Roble-*1526*
Mayer, Herbert Joseph — San Francisco — S.Engr. 134+177 — 236 Toyon
[13]Mayfield, Charles Edgar — Suisun — LD 25–36 — 349 Hamilton, P-p
[23]Mayfield, Wesley Waldo — Fallon, Nev. — Soc.S.-Jn. 91·25–5 — 205 Emsn., P-p
Mayo, Evans Blakemore — Palo Alto — Geol. gr. — 1004 Emerson, P-p
A.B., South Dakota, 1927; A.M., Stanford, 1929
[4]Mayo, Scovel Sumner — Cheney, Wash. — Educ. gr. — 118 Elwood, RC-rc
A.B., State College of Washington, 1922; A.M., Stanford, 1928
[234]Mays, Alfred S. — Sausalito — Pre-Med.90·20–6 — 455 Frst., P-*1150*
Mead, A. Ross — Turlock — M.E. 5·176+59 — 402 Sequoia
Mead, James Wilkinson — San Rafael — Econ.-Acct. 181+55 — 202 Toyon-*605*
A.B., Stanford, 1929
Meadowcroft, Niel Fairhurst — Modesto — S.Engr. 145+129 — 314 Sequoia-*1134*
[12]Meakin, Jack B. — Salt Lake City, U. — Econ. 181+57 — Phi Kappa Sigma
A.B., Stanford, 1929
Mearns, William Clark — Victoria, B.C. — LD 38–8 — 301 Encina-*1139*
Mears, James Blythe — Los Angeles — LD 92+49 — Beta Theta Pi-*1335*
[1]Mechem, Jesse — Las Cruces, N.M. — LD 13+9 — 32 Encina-*736*
Mechem, Onice Eugene — Los Angeles — S.Engr.84·77+84 — 409 Sequoia-*1911*
Medau, John Edward — San Mateo — Econ. 104+63 — Phi Gamma Delta
[4]Meekle, Jane Ina — Pasadena — Bot. gr. — Pacific Grove-pg
A.B., Iowa, 1911
Melgaard, Thomas Lee — Oakland — LD 93+24 — Phi Kappa Sigma
Mendenhall, Ernest D., Jr. — Piedmont — LD 45+27 — 223 Encina-*963*
Mendenhall, Ferdinand — Van Nuys — Soc.S.-Jn. 186+73 — Phi Sg.Kp.-*538*
A.B., Stanford, 1929
[1]Mendenhall, Zelda — Palo Alto — Pol.S. 43·140+14 — Delta Gam.-*1366*
A.B., Stanford, 1929
[1]Menke, C. Frederick — Minneapolis, Minn. — Econ.53·128+57 — 217 Branner-*2025*
A.B., Stanford, 1929
Mensinger, W. Robert, Jr. — Modesto — Law gr. — 520 Encina-*1474*
A.B., Stanford, 1928

[4]Mercado, Kate Salisbury	San Francisco	Engl. ‡ 15+20	277 Roble
[5]Mercado, Louis R.	San Francisco	Law gr.	242 Toyon-*2277*
A.B., Stanford, 1929			
Merchant, Henry R., Jr.	Asotin, Wash.	Law gr.	750 Bryant, P-*1003*
A.B., State College of Washington, 1928			
Mermod, Camille	Winters	Med. gr.	1143 Fulton, P-p
A.B., Mills, 1922			
Mermod, Léon Emile	Winters	Med. gr.	2321 Sacramento, SF-sf
A.B., Stanford, 1928			
[5]Merner, Benetta Delight	Hillsborough	Hist. 131+85	Kappa Kappa Gam.
[5]Merner, Ward Pfeiffer	Hillsborough	Cl.Lit. 144–9	Kingscote
[12]Merrill, Fred Homer	Beverly Hills	Econ. 99·83–3	321 Union-*2305*
Merritt, Julia Sutermeister	Ithaca, N.Y.	Psych. 106·99+106	Kap. Al. Theta
A.B., Stanford, 1929			
[4]Metts, Dean Francis	Houston, Tex.	LD ‡	Kappa Alpha
Metz, Doan Elvan	Monterey	LD 92+83	315 Sequoia-*852*
[4]Metzler, David Russell	Fresno	Educ. gr.	430 Stanford, M-*535*
A.B., Stanford, 1919			
[4]Metzler, William Herman	Los Gatos	Econ. gr.	627 Emerson, P-p
A.B., Stanford, 1919, A.M., 1925			
[4]Metzner, Florence Prior	San Francisco	Educ. gr.	536 Alvarado
A.B., Stanford, 1911			
Meyer, Carl W.	San Bernardino	Pol.S. 22·113+1	145 Toyon-*2116*
Meyer, Hugo Bardill	St. Louis, Mo.	LD 45+65	544 Lowell, P-p
Meyer, Margaret	Sacramento	Ed.-G.A. 182+100	Alpha Phi-*1387*
A.B., Stanford, 1929			
Meyer, Robert Wiepking	Palo Alto	LD 48+70	121 Waverley, P-p
Meyer, Ruth Robinson	Palo Alto	Phys.S. 15·147+248	121 Wvly.,P-p
[5]Meyer, William Wilfred	Palo Alto	Min. gr.	558 Forest, P-p
A.B., Stanford, 1926			
Michaels, Henry	Menlo Park	Econ. 139+31	Phi Kappa Sigma
Mielke, Albert John	Menlo Park	Econ.-Acct. 136+30	MP-Bx 275, p
[4]Mielke, Helen	Portland, Ore.	Engl. ‡	344 Roble-*864*
[4]Miksch, Walter P.	Portland, Ore.	Fr. gr.	847 Bryant, P-p
A.B., Linfield, 1926			
Miles, Ferris Wakefield	Palo Alto	S.Bus. gr.	235 Ramona, P-p
B.S., Utah Agricultural, 1927; M.B.A., Stanford, 1929			
Miles, Joseph Harvey	Los Angeles	Econ. 33·148+6	406 Laurel, P-p
A.B., Stanford, 1929			
Miles, Katherine	Los Angeles	Hist. gr.	Roble-*1724*
A.B., Stanford, 1929			
Miles, Thomas Kirk	Stanford Univ.	LD 96+71	607 Gerona Rd.
Millar, Glenn Emmet	Reno, Nev.	Pre-Med.92·44+23	552Alvrdo.-*944*
Miller, Albert George	San Francisco	LD 90+14	231 Branner-*2668*
[4]Miller, Albert William	Fresno	Educ. gr.	538 Lasuen-*2398*
B.S., California, 1908, M.S., 1916			
Miller, Arthur Capps	Salt Lake City,Utah	Law gr.	575 Embarcadero, P-*2454*
A.B., Stanford, 1928			
[5]Miller, Arthur Michael	Redlands	Engl. gr.	314 Union-*1995*
A.B., Redlands, 1928			
[12]Miller, Davis Salathiel	Lindsay	Econ. 88·94·46	134 Branner
A.B., Stanford, 1929			
[4]Miller, Dean Dunkle	Redlands	LD sp.	204 Union-*1995*
[4]Miller, Elmer	Provo, Utah	Econ. gr.	934 Webster, P-p
A.B., Stanford, 1914			
[4]Miller, Evelyn	San Jose	Span. gr.	Col.of Pacific,Stockton-s
A.B., Stanford, 1921			

Miller, Everett Leigh — Tacoma, Wash. — Econ. 135·45+35 — Phi Delta Theta
A.B., Stanford, 1929

[5]Miller, George Bernhard — San Francisco — LD 76+63 — Los Altos-*713*

Miller, Henry Clay, Jr. — Palo Alto — Econ. 135+58 — ThetaDeltaChi-*1828*

Miller, Jack Stadden — Los Angeles — S.Engr. 88·47+15 — 416 Encina-*989*

[1]Miller, Joseph Adams — San Francisco — LD 30–29 — Phi Gamma Delta

[1]Miller, Laura Minty — Los Angeles — Soc.S. 180+65 — Alpha Phi-*1387*
A.B., Stanford, 1929

Miller, Mervin Thomas — San Rafael — S.Engr. 90·44–2 — Phi Kap.Sg.-*901*

Miller, Miriam — Porterville — Zoöl. 161+238 — 335 Roble-*2194*

[14]Miller, Ream Victor — Riverside — Econ.-Acct.145+148 — PhiSg.K.-*538*

[1]Miller, Robert Lincoln — Palo Alto — Law gr. — 656 Bryant, P-*1363*
A.B., Stanford, 1928

Miller, Sally — Porterville — Phyl. gr. — 342 Roble-*2194*
A.B., Stanford, 1929

Miller, Willard Aldrich — Los Angeles — LD 39+15 — 344 Encina-*1493*

Milligan, Kenneth M. — Long Beach — Econ. 104+37 — Kappa Sigma-*1326*

Milligan, Robert F. — San Francisco — LD 75+7 — Phi Gamma Delta

[4]Milliken, Bruce E. — Salt Lake City, Utah — Educ. gr. — 327 Lytton, P-p
B.S., Columbia, 1910

Mills, Nelson — Santa Cruz — LD 90+53 — Zeta Psi-*B*

Milne, Stanley Arthur — Pasadena — Soc.S.-Jn. 135+53 — Theta Xi

Miner, Ruth Lenore — Hollywood — LD 45+68 — 370 Roble-*2366*

[4]Minton, Owens — Mountain View — LD — Mountain View-mv

Mires, Vincent Hall — San Francisco — Econ. 134+24 — 142 Toyon

[1]Misumi, Ichiro — San Francisco — LD 15+11 — Japanese Club-*598*

[34]Misumi, Issei — Fukuoka-Ken, Japan — Psych. gr. — Menlo Park-mp
A.B., McPherson, 1927

[4]Mitchell, Evelyn Dent — Oakland — Educ. 85·88+125 — 365 Roble-*544*

Mitchell, Hewitt Frenyear — Selma — S.Engr.5·142+126 — 310 Seq'ia-*1263*

Mitchell, John G. — Eureka — Law gr. — Delta Kappa Epsilon
A.B., Washington, 1928

Mitchell, John Waldo — Palo Alto — LD 93+39 — Zeta Psi-*B*

[4]Mitchell, Lynn Boal — Albuquerque, N.M. — Educ.gr. 1256 — College,M-Bx704,m
A.B., Ohio State, 1903; A.M., Cornell, 1904, Ph.D., 1906

[4]Mitchell, Marion — San Francisco — Econ. ‡ — Roble

[4]Mitchell, Morley Walker — Vancouver,B.C. — Educ. 121·50+19 — 415 Lytton, P-p

[4]Mitchell, Muriel — Osborne, Kans. — Span. gr. — 375 Roble
A.B., Maryville, 1917; A.M., Colorado, 1928

[4]Mitchell, Phoebe Elizabeth — San Jose — Educ. ‡ 15+7 — SJ-Rt. 1, Box 398, sj

Mitchell, Roy Fred — Grass Valley — Educ. 100+4 — 548 Encina-*1784*

Mittauer, George T. — San Francisco — LD 33–16 — 45 Encina-*2383*

[5]Mockett, Paul Hilliker — Kimball, Neb. — Econ. 164+64 — 119 Toyon

Moe, Chesney R. — Chula Vista — Phys.115·65+20 — 356Kipling,P-*1802*
A.B., Stanford, 1929

Moe, Douglas Lewis — La Grande, Ore. — Econ. 92·90+77 — 318 Emerson, P-p
A.B., Stanford, 1929

[4]Moe, Lillian J. — Turlock — Educ. ‡ — 354 Roble-*657*

Moffatt, Philip Julian — St. Louis, Mo. — LD 88+17 — Delta Kappa Epsilon

Moffitt, Albert Hubbard — Oakland — Pol.S.5·180+34 — Kappa Sigma-*1326*
A.B., Stanford, 1929

Möller, Cord Charles — Valley Springs — LD 88–7 — 129 Emerson, P-p

Moncrief, David M., Jr. — Honolulu, T.H. — LD 48+37 — 307 Encina-*2594*

Mondale, Walter E. — Lewistown, Mont. — Econ. 45·138+29 — Sigma Chi-*628*
A.B., Stanford, 1929

[4]Monroe, Charles Mattison — Palo Alto — Econ. ‡ — West Coast Mil. Ac., P-p

Monson, Junius A.B., Stanford, 1929	Santa Monica	Hist. 48·135+122	451 Encina-*1661*
[4]Montgomery, Berneth S.	Phoenix, Ariz.	Hist. ‡	Roble
Montgomery, Clifton Reynolds A.B., Stanford, 1928	Lodi	Law gr.	Beta Theta Pi-*1335*
[4]Montgomery, Cora May A.B., Stanford, 1928	Palo Alto	Engl. gr.	556 Lytton, P-p
Montgomery, John Warren	Talmage	Pol.S. 90·47+10	447 Encina-*810*
[4]Montgomery, Marie Johnson A.B., Idaho, 1927	Boise, Ida.	Engl.-P.Sp. gr.	418 Florence, P-p
[4]Montgomery, Ruth	Cupertino	LD	Cupertino-c
[4]Montgomery, Warren James A.B., Idaho, 1928	Boise, Ida	Law gr.	418 Florence, P-p
Moomaw, Chester Carl	Wilmington	Econ. 164+25	Delta Tau Delta
[4]Mooney, Charles Neil	San Francisco	LD	108 Encina
[1]Moore, Charles Lock A.B., Stanford, 1929	El Cajon	Econ. 180+115	Al. Tau Ome.-*1384*
Moore, George Eugene	Lodi	Econ. 129+51	Alpha Delta Phi-*J*
Moore, Howard H.	Honolulu, T.H.	LD 94+55	137 Branner-*2804*
Moore, Jack Kuehn A.B., Stanford, 1928	Los Angeles	Med. gr.	2474 Washington, SF-sf
Moore, Louis Charles	Vacaville	LD 45+31	118 Encina-*1025*
[5]Moore, L. Franklin, Jr.	Canton, Mass.	Pol.S. 94·84–11	209 Sequoia-*526*
[4]Moore, Marguerite A.B., Stanford, 1918	San Jose	Hist. gr.	955 Plaza Drive, SJ-sj
Moore, Richard William	Los Angeles	LD 90+47	Pacific Grove-pg
[5]Moore, Robert Marion A.B., Stanford, 1929	San Jose	Educ. gr.	57 Magnolia, SJ-sj
[12]Moore, Stanley Ten Eyck A.B., Stanford, 1929	Sausalito	Engl. 36·144+55	320 Sequoia-*1060*
[4]Moran, Thomas William, Jr.	Oakland	LD ‡	228 Union-*891*
Morbeck, Dorothy Jane	Kingston, Ida.	LD 49+31	156 Roble-*1038*
Morehouse, Merrill W.	Hollywood	LD 34–2	408 Encina-*2048*
Moreland, William D., Jr. A.B., Stanford, 1929	Portland, Ore.	Pol.S. 90·90+13	24 Branner-*2757*
Morey, David Howard A.B., Stanford, 1929	St. Louis, Mo.	Econ. 90·96+103	Theta Chi-*1383*
Morf, F. William, Jr.	Barrington, Ill.	Econ. 105+59	125 Branner-*966*
Morgan, Donald Arol	Aberdeen, Wash.	Chem. 99·43+10	423 Encina-*1605*
[12]Morgan, Edwin Henry	Roseville	Chem. 90·50–12	436 Encina-*992*
Morgan, Isabel Merrick	Pasadena	LD 48+23	345 Roble-*1603*
Morgan, James William	Corning	Pol.S. 90·31+31	308 Sequoia-*971*
Morgan, Lucile Frances	Youngstown, O.	LD 44+15	204 Roble-*684*
Morgan, Nathaniel Richard A.B., Stanford, 1928, Engineer, 1929	Palo Alto	E.E. gr.	107 Sequoia-*1742*
[34]Morgan, Theodore Harding A.B., Stanford, 1920	Palo Alto	E.E. gr.	243 Waverley, P-*2235*
[4]Morgensen, Florence Marie	Sunnyvale	Educ. ‡	219 Murphy, S-s
Morgenson, Dana Clark	Escalon	Engl. 90·90+59	420 Encina-*1481*
[4]Mork, Donald James A.B., College of the Pacific, 1921	San Jose	Econ. gr. *327*	E. San Carlos, SJ-sj
[4]Morris, Agnes	Fallon, Nev.	Engl. ‡	171 Roble
Morris, Alexander Bogy	Hollywood	Econ. 134+65	116 Toyon-*2237*
Morris, Bernard	Burlingame	Hist. 90·45+0	502 Encina
[1]Morris, Joe J.	San Francisco	LD 70–24	Phi Gamma Delta
Morris, John Royden A.B., Stanford, 1929	Victoria, B.C.	Econ. 48·134+19	Theta Xi

[23]Morris, Willard H. Ypsilanti, Mich. Hist. gr. 555 Encina-*871*
A.B., Michigan State Normal, 1926
[5]Morrison, Allan Ross Eureka Law gr. 536 Alvarado
A.B., Stanford, 1929
[4]Morrison, Catherine D. San Francisco Educ. ‡ 20+20 368 Roble
[4]Morrison, Cecile W. Beverly Hills Fr. gr. 527 Cornell, M-*2624*
A.B., Pomona, 1918
Morrison, Dale Angus Santa Clara Econ. 90·47+43 1160Monroe,SC-sc
Morrison, Dean Seattle, Wash. Econ. 128+35 Theta Chi-*1383*
Morrison, Harry Clifford Los Angeles LD 55+11 233 Branner-*2677*
Morrison, John Blair San Mateo Econ.-Ac.139+109 249 Toyon-*2668*
Morrison, William G. Monterey Econ. 68·113+4 Kingscote
A.B., Stanford, 1929
Morrow, Robert Ewing Los Angeles LD 88+9 Theta Delta Chi-*919*
Morrow, Thomas H. T. Tacoma, Wash. LD 46+54 353 Encina-*1148*
Morrow, William C. Tacoma, Wash. LD 40+8 353 Encina-*1148*
[5]Morse, Cecily Menlo Heights Fr. 15·121+103 Del. Del. Del.-*840*
Morse, Charles Orrin Berkeley Psych. 135·45+16 MP-Bx 82N, mp
A.B., Stanford, 1929
Morse, Constance Menlo Heights LD 29·47+28 206 Roble-*840*
[1]Morse, Nathan Charles Altadena Econ. 135·45+1 1560 Cowper, P-p
[5]Morse, Stanley Wallace Palo Alto Chem. gr. 161 Cowper, P-p
A.B., Hanover, 1920; A.M., Stanford, 1926
[12]Morse, William Russell Palo Alto Engl. gr. 535 Salvatierra-*1051*
A.B., Harvard, 1876, A.M., 1910, Ph.D., 1914
[4]Morthland, Andrew Palisades LD 140 Toyon-*2608*
[1]Morton, Charles Villiers Manila, P.I. Econ.20·168–9 Kappa Sigma-*1326*
Morton, Harry Sankey Manila, P.I. LD 90+13 Kappa Sigma-*1326*
[4]Moseley, Ella A. Sebastopol Educ. gr. Cowper Ct. Apts, P-p
A.B., State College of Washington, 1922
[6]Moseley, Glenn Harrison Sebastopol Educ. gr. Cowper Ct. Apts, P-p
B.S., Nebraska, 1917
Moser, Henry Stanford Univ. LD 12·49+13 441 Foothill Road
[4]Mosher, John A. Pomona Educ. gr. 213 Union
A.B., Stanford, 1927
[1]Moss, Hugh Terrell Los Angeles LD 61–14 Sigma Chi-*628*
Mossman, Ralph Westbrook Antioch M.E. gr. 1033 Guinda, P-p
A.B., Stanford, 1928
[5]Mothershead, John Leland, Jr. Pasadena Phil. 143+99 443 Kipling, P-p
Mott, George Fox, Jr. Riverside Pol.S. gr. 209 Sequoia-*688*
A.B., Stanford, 1929
[5]Mott, Paul William San Diego Educ. gr. 356 Kipling, P-p
A.B., San Diego State Teachers College, 1928
Motz, Leslie Leland Bisbee, Ariz. LD 44+6 694 Alvarado
[4]Moulton, Florence Ellen Menlo Park Hist.gr. Conv.Sac.Heart, MP-mp
A.B., College of the Sacred Heart, 1922; A.M., Stanford, 1923
Moulton, Virginia Chico Soc.S.-Jn.180+172 Kap.Kap.Gam.
A.B., Stanford, 1929
Mudge, Anne Cushman Sacramento Ed.-G.A. 182+149 310 Roble-*1584*
A.B., Stanford, 1929
Mudgett, Margaret Holt Los Angeles Soc.S. 180+159 244 Roble-*1644*
A.B., Stanford, 1929
Muirhead, Alexander John Modesto Econ.-Acct. 90·39–22 Phi Kap.Sig.
Mujica, Wilfred Cuzco, Peru LD 89+116 511 Bowdoin, M-*1297*
Mulford, Raymon Howard Palo Alto LD 91+93 PA-Box 35, RFD, p
Muller, Donald Fletcher San Francisco Econ. 162+74 Alpha Sig. Phi-*1357*
Muller, Siemon W. Vladivostok, Siberia Geol. gr. 818 Middlefield, P-*655*
A.B., Oregon, 1927; A.M., Stanford, 1929

Mullgardt, Alex Steffens — San Francisco — M.E. gr. — 353 Lowell, P-p
B.S., California, 1923
Mullin, J. Stanley — Los Angeles — Econ. 141+141 — Alpha Delta Phi-*J*
Mulvane, Raymond Leon — Corona — LD 35+11 — 385 Encina-*1045*
[1]Mulvaney, Robert E. — Billings, Mont. — Econ. 86·99+28 — Sigma Chi-*2706*
A.B., Stanford, 1929
Mulvey, Anthony — San Diego — S.Engr.144+101 — 131 Branner-*2757*
[4]Munday, Waldo Volrath — Redwood City — LD — 936 Durlston Rd., RC-rc
Mundt, Kenneth Francis — Folsom City — S.Engr. 90·93+75 — 405 Sequoia-*970*
A.B., Stanford, 1929
[4]Munsell, Ruth — San Diego — Educ. gr. — 205 Roble
A.B., San Diego State Teachers College, 1926
Munson, Floyd E. — Azusa — Chem. 90·45+3 — 434 Encina-*537*
Murdock, Robert Kelton — Bakersfield — LD 45·45–13 — 42 Encina-*2034*
[4]Murphy, Fred — Honolulu, T.H. — Educ. gr. — 301 Union
A.B., Hawaii, 1929
Murphy, John C. — New York, N.Y. — Pre-Med. 103+53 — 365 Lincoln, P-p
[5]Murphy, Malcolm Price — Colo. Spr., Colo. — Hist. gr. — 845 Waverley, P
A.B., Colorado College, 1926
[12]Murphy, Michael Mark — Berkeley — Econ. 180+23 — Delta Kappa Eps.
A.B., Stanford, 1929
Murphy, Paul Fuller — Portland, Ore. — Hist. 146+10 — Chi Psi-*1648*
Murphy, Thomas Gabriel — Los Angeles — Econ. 119+14 — Beta Theta Pi-*1335*
Murray, Donald Angus — Suisun — E.E. gr. — 321 Sequoia-*2219*
A.B., Stanford, 1928
[12]Murray, Janet Helen — La Grange, Ill. — Econ. gr. — Menlo Heights-*1464*
A.B., Vassar, 1926
Murray, Paul Wendle — Santa Cruz — Econ. 90·38–10 — 315 Everett, P-p
[5]Musante, Catherine A. — San Francisco — LD 45+28 — 236 Roble-*2055*
Musgrove, J. DeKalb, Jr. — Woodland — LD 42+4 — 404 Encina-*994*
Musick, Lewis Willis — Newark — S.Biol. gr. — 723 Santa Ynez
A.B., Stanford, 1929, A.M., 1929
[4]Muzzall, Ernest L. — Ritzville, Wash. — Educ. gr. — 418 Florence, P-p
A.B., State College of Washington, 1923
[5]Myers, George Sprague — Palo Alto — Zoöl. 33·126+47 — 555 Everett, P-p
Myers, James Henry — Fallbrook — Soc.S.-Jn.90·90+47 — 558Enc'n-*1269*
A.B., Stanford, 1929
[4]Myers, Marion Frances — Omaha, Nebr. — Engl. ‡ — 618 Webster, P-*1009*
[2]Myers, Morgan Lewis — Omaha, Nebr. — LD 55·38–28 — 375 Everett, P-p
Myers, Robert Leland — Portland, Ore. — LD 45+47 — 109 Encina-*1135*
[4]Mylne, Ann Malloch — McMinnville, Ore. — S.Biol. gr. — 350 Roble
A.B., Oregon, 1925
[4]Mynard, Robert Henry — Oakland — LD — 114 Toyon-*1607*
Nabil, Marzieh Khanom — Berkeley — Engl. 94·51+68 — 207 Roble-*1586*
Naff, Clarence R., Jr. — Hollywood — Econ. 11·130+47 — 242 Branner-*84*
Nagle, Wesley Michael — El Paso, Tex. — Chem.25·197+272 — 104 Branner-*564*
A.B., Stanford, 1929
[1]Nakano, Kuniko — Tokyo, Japan — S.Engr. 90·35–21 — Jap'se Club-*598*
[12]Nakano, Stewart Kazuichi — San Francisco — Econ.180+218 — Los Altos-Bx126,1a
A.B., Stanford, 1929
[4]Napier, John Hawkins, Jr. — Emeryville — Educ. gr. — Univ. Park-*2801*
B.S., Mississippi A. and M. College, 1920; A.M., California, 1925
Narbutovskih, Paul M. — San Francisco — S.Engr. 90·93+112 — 574 Foothill
A.B., Stanford, 1929
Nash, Hammond Goodrich — Altadena — LD 39+1 — 323 Encina-*2375*
[3]Nash, Henry Mabry — Fate, Texas — LD 76–21 — 728 Forest, P-p
[4]Nash, Lulu Mason — Sandpoint, Ida. — Hist. gr. — 315 Roble-*2803*
A.B., State College of Washington, 1922

Nash, Paul Dudley — El Centro — LD 44+29 — 127 Churchill, P
Nason, Richard N., Jr. — San Francisco — Chem.5·187+101 — PhiSg.Kappa-*538*
A.B., Stanford, 1929
[12]Naumes, Edward P. — Hood River, Ore. — Econ. 180+139 — 221 Toyon-*2757*
A.B., Stanford, 1929
[4]Naylor, Blanche — San Diego — Educ. gr. — 593 Salvatierra-*878*
A.B., San Diego State Teachers College, 1924
Neale, Roderick Malcolm — San Mateo — LD 47+19 — 338 Encina
Neddermeyer, Seth Henry — Santa Ana — Phys. gr. — 315 Union-*714*
A.B., Stanford, 1929
[2]Neef, John Vernor — Santa Cruz — LD 53–11 — 405 Kipling, P
[1]Neff, Alice Lee — Palo Alto — LD 29+22 — 131 Cowper, P-p
Neighbors, Clarence Beatty — Anaheim — Chem. 106·86+12 — Sig.Al.Eps.-*1305*
A.B., Stanford, 1929
Neikirk, William Thom — Palo Alto — LD 89+50 — Sigma Chi
[4]Neil, Gertrude Helen — San Francisco — Ed.-G.A. 132·15+25 — 260 Roble
Neill, Phillip S. — Los Angeles — LD 42·45+13 — 219 Encina
Neilson, Caroline McDougal — San Diego — LD 95+49 — Kappa Alpha Theta
[234]Nelson, Albert G. — Santa Clara — Hist. gr. — Menlo Heights-*2663*
A.B., California, 1928
Nelson, Arnold Harvey — Clovis — Law gr. 1212ElCam.Rl.,Blngme-b
A.B., Stanford, 1925
[3]Nelson, Clifford Adolph — San Francisco — S.Biol. 10·129+47 — 405 Encina
[234]Nelson, D. Lloyd — Dallas, Tex. — Educ. gr. — 263 Lytton, P-p
A.B., Abilene Christian College, 1929
Nelson, Donald Sheets — Arbuckle — Econ. 176+87 — Phi Kappa Psi
Nelson, Edward Gene — Spokane, Wash. — Econ. gr. — 838 Cowper, P-*622*
B.S., Southern California, 1926, A.M., 1928
[4]Nelson, Evelyn Hart — Anamosa, Iowa — Phyl. gr. — 226 19th, PG-pg
A.B., Iowa, 1924
Nelson, John Lloyd — Oakland — S.Engr. 7·175+43 — 109 Sequoia-*859*
A.B., Stanford, 1929
[4]Nelson, Lawrence Emerson — Redlands — Engl. gr. — 206 Union
A.B., William Jewell, 1915; A.M., Kansas, 1921
[1]Nelson, Mary Rita — Menlo Park — Econ. gr. — Menlo Park-RD 197, mp
A.B., Stanford, 1924
[4]Nelson, Ora Holt — Dallas, Tex. — LD ‡ — 532 University, P-p
Nelson, Robert Edmund — Los Gatos — LD 89+62 — Los Gatos-R 1, Bx72,lg
Nelson, Ruth H. — Kansas City, Mo. — LD 42–2 — 110 Roble-*2373*
Nelson, Walter Andrew — Long Beach — Econ. 180+32 — 536 Alvarado-*1831*
A.B., Stanford, 1929
[4]Nesbit, Glenn A. — Phoenix, Ariz. — Educ. gr. — 329 Roble-*1695*
A.B., De Pauw, 1926
[12]Nevers, Ernest — Palo Alto — LD 105+31 — 551 Tennyson, P-p
[23]Newbegin, John James — San Francisco — LD 15+5 — 352 Encina-*1671*
Newbegin, John William — Tacoma, Wash. — Econ. 180+76 — 120 Toyon-*1671*
A.B., Stanford, 1929
[4]Newberry, Helen Camilla — Berkeley — Hist. gr. — 1112 Ramona, P-p
A.B., California, 1924
[4]Newby, Lee Clinton — San Jose — Germ. gr. — Sigma Chi
B.S., California, 1910, M.S., 1911
Newcomb, Walter Martin — Palo Alto — LD 44+7 — 2027 Emerson, P-p
Newcomer, Margaret H. — Santa Monica — LD 45+51 — 352 Roble-*2304*
[4]Newcomer, Mary Adele — San Rafael — Educ. gr. — 247 Everett, P-p
A.B., Stanford, 1924
Newell, Joseph C. — Palo Alto — LD 22·62+8 — Encina
[4]Newell, Paul Clark — Los Angeles — Pol.S. gr. — 627 Waverley, P-*1282*
A.B., Occidental, 1928

Newkirk, Katharine Andrus Palo Alto Pol.S. gr. 455 Forest, P-p
A.B., Pomona, 1923; A.M., Stanford, 1928
[4]Newlee, Bailey Hayden, Jr. Taft Engl. gr. 138 Toyon-*875*
A.B., Stanford, 1927
Newman, Henry Wise San Francisco Med. gr. 2901 Buchanan, SF-sf
A.B., Stanford, 1927
Newman, Robert Wilson Ogden, Utah Med. gr. 2275 Jackson, SF-sf
A.B., Stanford, 1928
[5]Newton, Glenn De Witt Dinuba Law gr. 431 Encina-*567*
A.B., Stanford, 1924
[134]Nichols, Alfred I. Wellsboro, Pa. Econ. gr. 425 Embarcadero, P-p
A.B., Colorado, 1927
[4]Nichols, Ambrose Reuben San Jose Educ. gr. 402 S. 14th, SJ-sj
B.S., Upper Iowa, 1902
Nichols, Eleanor M. Pasadena Zoöl. 181+231 321 Roble-*2302*
A.B., Stanford, 1929
Nichols, Harry A., Jr. San Francisco LD 98+74 Theta Xi
Nichols, James Ross Stanford Univ. Geol. 131–4 Delta Tau Delta-*1363*
[5]Nichols, John Ralph Palo Alto Educ. gr. 251 Lincoln, P-p
B.S., Oregon State Agricultural, 1922; A.M., Stanford, 1925
Nichols, Robert M. San Francisco LD 55+52 444 Encina-*1001*
Nichols, William Ford Shanghai, China LD 91+65 Delta Chi-*1304*
[5]Nickell, Morgan Robin Long Beach Econ. 163+55 Delta Upsilon
Nicol, Allen Hankins Coronado Ed.94·48+41 604 Glmn.,P-Bx442,p
[4]Nielsen, Helen Marie San Jose Educ. gr. 87 Cleaves, SJ-sj
A.B., San Jose State Teachers College, 1928
[1]Nielson, Sigvald Edmonton, Alta. Law gr. 728 Bowdoin, M-*2555*
A.B., Alberta, 1922, LL.B., 1924; J.D., Stanford, 1929
Nikirk, Jane San Francisco LD 47+58 334 Roble
[4]Nikirk, Martha San Francisco LD 324 Roble
[4]Nilsen, Rose Claire San Francisco Educ. gr. 312 Roble-*595*
A.B., San Francisco State Teachers College, 1928
[1]Nims, Charles Francis Portland, Ore. LD 4–13 230 Encina-*721*
Nisbet, Alfred Waters Fellows LD 86+13 Delta Tau Delta-*2794*
Nishihashi, Keizo Kagoshima, Japan S.Engr. 90·62+0 JapaneseClub-*598*
Nishimoto, Skigeaki San Francisco S.Engr.184+203 JapaneseClub-*598*
A.B., Stanford, 1929
Nitchy, Fred A., Jr. Portland, Ore. LD 84–10 Theta Chi-*1383*
[23]Noble, William Roberts Sacramento LD 59–12 Theta Delta Chi-*1828*
Nobs, Benita Edith Grass Valley LD 91+63 308 Roble-*1635*
[3]Nock, Harold P. Melbourne, Australia LD 56–22 Phi Kappa Sigma
[12]Noll, Mark Daniel Seattle, Wash. Econ. gr. 13 N. 33d, SJ-sj
B.B.A., Washington, 1923
[234]Norberg, Nils Gunnar Little Falls,Minn. Econ. 114–10 403 Encina-*2042*
[4]Nordgren, Lilly Portland, Ore. Educ. gr. 149 Roble
B.S., Oregon State Agricultural, 1924
[23]Nordstrand, Norman W. San Francisco LD 14·39–8 112 Encina
[1]Norman, Lewis Arthur, Jr. Santa Ana LD 55+55 526 University, P-p
¶Norman, Winston Palo Alto Soc.S.-Jn.180+216 1776Wvly.,P-p
A.B., Stanford, 1929
Norris, Frank Palo Alto LD 42+5 409 Encina-*2224*
[4]Norris, Gertrude Sacramento Econ. ‡ 309 Roble
[5]Norris, Nilan Elmer Palo Alto Econ. 90·31+53 117 Tennyson, P-p
North, Edmund Hall Hollywood LD 42+2 39 Encina-*1576*
Northcote, Oliver S. Brentwood Heights Econ. 180+80 *237 Toyon-807*
A.B., Stanford, 1929
[5]Northrop, Robert Starr, Jr. Napa Econ. 145+141 Sig. Al. Eps.-*1674*

Northway, Fred James — Hughson — Soc.S. 141+158 — 212 Branner-*1312*
Northway, William Herrick — Hughson — Med. gr. — 2180 Washington, SF-sf
A.B., Stanford, 1926
[12]Norton, Thomas W. — San Luis Obispo — LD 24–24 — 124 Encina-*1471*
Norvell, Oliver Wendell — Ima, N.M. — S.Biol. 90·69+4 — 636 Alvarado-*1127*
[4]Notter, Harley Arthur — Forest Grove,Ore. — Hist. gr. — 949 Webster, P-p
A.B., Puget Sound, 1925; A.M., Stanford, 1927
Nourse, Elisabeth — Palo Alto — LD 43+23 — 354 Roble-*2414*
Nourse, Joan — San Francisco — LD 92+44 — Kappa Kappa Gamma
[5]Nourse, John Lincoln — Palo Alto — Pol.S. 98+124 — Sigma Chi-*628*
Nunes, James Manuel — Niles — Econ. 134+80 — 105 Sequoia-*1082*
[23]Nute, James C. — Palo Alto — LD 43·28+9 — 260 Churchill, P-p
Nute, J. Warren — Palo Alto — S.Engr.49·113+67 — 260Ch'rch'l,P-p
Nutt, Jack — Los Angeles — Soc.S. 127+52 — Theta Xi
Nye, H. Safford — Alhambra — Econ. 136+102 — Sigma Chi-*628*
Nye, Irvine H. — Alhambra — Econ. 42·151–10 — Sigma Chi-*628*
[4]Nye, Neva Euphemia — Hudson, Mich. — Fr. gr. — 338 Roble-*643*
A.B., Michigan, 1926
Nyi, Tsung Yuh — Soochow, China — Law gr. — 1535 W. College, P-*954*
A.B., Chih Tze, 1928; LL.B., Comparative Law School of China, 1928; J.D., Stanford, 1929
Nylander, Towne Joseph — Berkeley — Econ. gr. — 453 Kipling, P-p
A.B., California, 1922, A.M., 1922
[4]Oatman, Jack Lawrence — San Diego — LD ‡ — Chi Psi
[34]Oberson, Louis Edward — Mabton, Wash. — Educ. gr. — 224 Union-*503*
A.B., Willamette, 1928
O'Brien, Bickford Clarence — Los Angeles — Ed.-G.A. 87·46+17 — Theta Xi
O'Brien, Charles Thomas — Sacramento — Pol.S.90·46+24 — 1001 Rmna.,P-*2486*
O'Brien, George Francis — Sacramento — Pre-Cl.90·96+24 — 1001Rma.,P-*2486*
A.B., Stanford, 1929
[1]O'Brien, Richard Joseph — San Francisco — Econ. 135–20 — Alpha Sig. Phi-*1357*
O'Connell, Thomas F., Jr. — San Diego — Pre-Med. 90·45+49 — Pacific Gr.-pg
[1]Oddie, Richard Meigs — San Francisco — LD 45–11 — Chi Psi-*1648*
Odell, Cary Elliott — Beverly Hills — LD 43+24 — 426 Encina-*2684*
[234]O'Donnell,EdwardSheridan — LosAngeles — S.Engr. 110+20 — Phi Gamma Delta
[4]Oertel, Ernest Edward — Newman — Educ. gr. — 929 Webster, P-p
A.B., Washington, 1920; A.M., California, 1925
[3]Oeschger, Joseph Carl — Palo Alto — Educ. 116·34+12 — 724 Bryant, P-p
Oestreich, Louise E. — Albuquerque, N.M. — Span. 64·128+167 — 240 Roble-*2221*
A.B., Stanford, 1929
O'Farrell, Norman Morris — San Diego — LD 44+3 — 350 Encina-*2572*
Off, Charles Frederick — Los Angeles — LD 77+21 — Theta Xi
[2]Ogasawara, Kamazo — Mt. View — LD sp. 2–5 — 260 View,Mt.View-mv
[4]Ogden, George Lee — Republican City, Neb. — Educ. gr. — 728 Bowdoin, M
A.B., Nebraska Wesleyan, 1917
Ogg, Richard Andrew, Jr. — Palo Alto — Chem. gr. — 369 Forest, P-p
A.B., Stanford, 1929
[5]Ogier, Florence Lee — San Jose — Pol.S. 43·79+3 — Chi Omega
[1]Okker, William — Burlingame — LD 89+35 — 111 Toyon-*2131*
[5]Okumoto, Yoshio — Hilo, Hawaii — Anat. gr. — 205 Union-*1444*
A.B., Stanford, 1928
Oliver, Alden Edward — Mt. Eden — LD 91+43 — 17 Toyon
Oliver, Richard A. C. — Edinburgh, Scot. — Psych. gr. — 6 Union-*2011*
A.M., Edinburgh, 1925, Ed.B., 1927
Olmsted, Ardiane — Pasadena — LD 29+19 — 350 Roble-*2755*
Olmsted, Frederick — Stanford Univ. — LD 41+12 — 226 Encina
Olsen, Alonzo Young — Venice — Pre-Med. 139+111 — Theta Chi-*1383*

[4]Olsen, Daniel Minter — Red Bluff — Educ. gr. — 213 Union-*1104*
A.B., Stanford, 1925
[124]Olsen, George Fredric — Los Angeles — LD 75–17 — Kappa Sigma-*1326*
[1]Olsen, William Alvin — Santa Rosa — S.Engr.88·13–11 — 406 Sequoia-*1885*
[1]Olsen, William Irvin — San Mateo — Pol.S. gr. — 114 Warren, SM-sm
A.B., Stanford, 1928
[3]Olson, A. Clarence — Burlingame — Econ.-Ac.115·16+12 — 1900Hlsd.B-b
[2]Olson, Louis Victor — Salt Lake City, Utah — Chem. 183+62 — 7 Union-*905*
A.B., Stanford, 1929
Olson, Lyle Williams — Sioux Falls, S.D. — Econ. 180+121 — Alpha Tau Omega
A.B., Stanford, 1929
Olson, Obert B. — Long Beach — S.Engr.98·44+31 — 450ElEscpdo-*542*
[4]Olson, Oscar Henry — Redwood City — Educ. gr. — Redwood City-rc
B.S., California, 1924
Olson, Sidney Julien — Turlock — Phyl. 90·90+22 — 451 Encina
A.B., Stanford, 1929
[4]Olston, Julia Victoria — Athol, Ida. — Ed.-G.A.‡ — 152 Roble
[1]O'Malley, Charles Donald — San Francisco — Hist. gr. — 146 Toyon
A.B., Stanford, 1928, A.M., 1929
O'Meara, Carroll Gerald — Los Angeles — Soc.S.-Jn.94·86+24 — 537Encina-*826*
A.B., Stanford, 1929
Oneal, Duncan — San Jose — Law gr. — 211 S. 10th, SJ-*1363*
A.B., Stanford, 1927
[4]Oneill, Claire Husted — Stanford Univ. — LD ‡ — 583 Lagunita-*1292*
Ophüls, Elinor Helen — San Francisco — LD 48+36 — 329 Roble-*2322*
[134]Ophüls, Ernst Carl — San Francisco — Econ. 149+59 — Alpha Delta Phi-*J*
Orner, Arthur — Cleveland, Ohio — Psych.91·45+22 — 505 Encina-*1833*
[23]Orr, Joseph Knight — Laramie, Wyo. — LD 84·23–10 — 136 Encina
Orrick, Ernest Frank — Woodland — S.Engr. 90·90+32 — 1116 Bryant,P-p
A.B., Stanford, 1929
Orsborn, Ernest Vincent — San Francisco — Med. gr. — 1805 Pine, SF-sf
A.B., Stanford, 1926
[4]Osborn, Eleanor — Bellingham, Wash. — Educ. gr. — 159 Melville, P-*1876*
B.S., Columbia, 1914
Osborn, Helen Dunstan — Fresno — LD 46+57 — 306 Roble-*2735*
Osborne, Selden Leroy — Chula Vista — LD 46+39 — 249 Encina
Oshier, Edwin Harlow — Boston, Mass. — LD 83+17 — 202 Sequoia-*656*
[4]Ostrander, Marie Clarke — Arcata — Educ. gr. — 627 Emerson, P-p
A.B., Humboldt State Teachers College, 1928
O'Sullivan, John Clark — Morgan Hill — Pol.S. 5·146–21 — 213 Sequoia-*2008*
[4]Osuna, Aurelia Maria — Albuquerque, N.M. — Span. gr. — 273 Roble
A.B., New Mexico, 1922
[4]Osuna, Pedro — Marysville — Educ. gr. — Staller Ct. Apts., P-p
B.S., New Mexico College of Agriculture, 1920
Oswill, Donald Charles — Richmond — LD 74+22 — 240 Branner-*2434*
[3]Ott, Henry Donwardt — Ithaca, N.Y. — Geol. gr. — 735 Dolores
A.B., Rochester, 1929
[12]Ouchi, Yoshio — Fukuoka, Japan — Zoöl. gr. — Japanese Club-*598*
A.B., Stanford, 1928, A.M., 1929
Ouimet, Harold Kingsbury — San Jose — Educ. gr. — 124 Emerson, P-p
A.B., San Jose State Teachers College, 1927; A.M., Stanford, 1929
Overman, Eugene Jackson — Portland, Ore. — S.Bus. gr. — 124 Emerson, P-*2814*
A.B., Reed, 1927
Overton, Mark Deering — Los Angeles — LD 41–12 — 224 Encina-*1615*
[1]Overton, Nancy Elton — Piedmont — LD 16+7 — 271 Roble-*2414*
Owen, Louis Jackson — Stanford Univ. — LD 48+17 — 302 Encina
Owen, Margaret — Stanford Univ. — Hist. 184+162 — 553 Salvatierra
A.B., Stanford, 1929

Owen, Zona Celestene	Caspar	LD 93+48	316 Roble
[4]Owens, Cletus J.	Manderson, Wyo.	Educ. gr.	557 Lasuen
B.S., Iowa Agricultural, 1925			
Owens, Jeanette C.	San Francisco	Econ. 90·90+18	Al. Omi. Pi-*1367*
A.B., Stanford, 1929			
[1]Ownby, James, Jr.	Gridley	Bact. gr.	412 Tasso, P-p
A.B., Stanford, 1928			
Packard, Walter Haskins	Corcoran	LD 80+30	202 Branner-Box 653, p
[3]Paddleford, Hugh T.	Lodi	LD 48–15	Phi Gamma Delta
Padgett, Vernon W.	Texarkana, Ark.	Pre-Clin.221+176	307 Branner-*864*
A.B., Stanford, 1929			
Page, Ernest Winslow	Berkeley	Pre-Med. 135+173	Al.Kp.Lm.-*658*
[1]Page, Lewis Morton	Kansas City, Mo.	LD 50+9	526 University, P-p
[1]Page, Ross	Menlo Park	Educ. gr. 137	Partridge, MP-*1090*
A.B., State College of Washington, 1920; A.M., Stanford, 1929			
Pahl, Jack George	Berkeley	LD 46+21	233 Encina-*1193*
[1]Pahl, Rudolph Mentz	Berkeley	LD 81+22	245 Toyon-*1107*
[4]Paine, Elizabeth Trueblood	Berkeley	LD	229 Roble
Paine, Robert Findlay	San Francisco	Econ.137+81	Delta Tau Del.-*1363*
Paine, Robert Treat	Redlands	Cl.Lit. 80–7	Alpha Tau Omega
Paine, Roy Eddy	San Francisco	Min. gr.	409 Sequoia-*2218*
A.B., Stanford, 1927			
[12]Painter, Edwin Merle	Bakersfield	S.Engr.5·175+184	212 Toyon-*1917*
A.B., Stanford, 1929			
Palmateer, Ethel May	Palo Alto	LD 91+50	Delta Delta Delta-*1325*
Palmberg, Herbert George	Astoria, Ore.	LD 93+94	302 Sequoia-*937*
[23]Palmer, Adelaide Dingley	Palo Alto	Ed.-G.A. 129+72	369Churchill,P-p
Palmer, Alfred Marlatt	Rosalia, Wash.	Pre-Med.132+91	Pacific Grove-pg
[3]Palmer, Kathryn	Saratoga	Engl.-P.Sp. ‡ 15+18	152 Roble
Palstine, John O.	Stanford Univ.	Law gr.	318 Union-*1074*
A.B., Stanford, 1926, J.D., 1929			
Pamphilon, George Maxwell	Burlingame	S.Engr. 104+50	2015 Br'dway, B-b
Pao, Hua Kuo	China	Pol.S. gr.	72 S. 6th, SJ-*2431*
A.B., Stanford, 1929			
[4]Pappadiamontis, Nicholas	Fort Dodge,Ia.	LD	San Mateo-Box 91, sm
Paradise, Robert Eliot	Los Angeles	Law gr.	741 Addison, P-*1086*
A.B., Stanford, 1927, J.D., 1929			
[4]Parker, Darrell Russell	Phoenix, Ariz.	Law gr.	Phi Sigma Kappa-*538*
A.B., Stanford, 1926, A.M., 1929			
Parker, Frank Botsford	San Diego	LD 73+13	138 Toyon-*2244*
[4]Parker, Gladys Houston	Ft. Worth, Tex.	Educ. gr.	171 Emerson, P-p
A.B., Texas Christian, 1919			
[5]Parker, John Stone	Rockford, Ill.	LD 64+8	Phi Delta Theta
[4]Parker, Mary Elizabeth	Ft. Worth, Tex.	Educ. gr.	171 Emerson, P-p
A.B., Texas Christian, 1923			
[12]Parker, Robert Wheeler	Shreveport, La.	Geol. gr.	535 Salvatierra-*34*
A.B., Missouri, 1928			
Parker, Truman Alfred	Stanford Univ.	M.E. 145+58	Kappa Sigma-*1326*
Parkin, Harry Dravo, Jr.	Los Angeles	LD 53+2	346 Encina-*2129*
[4]Parslow, Philip Vere	Southgate	LD ‡	2105 Emerson, P
Parsons, John Frederick	San Diego	M.E. gr.	315 Union-*2331*
A.B., Stanford, 1928			
[1]Parsons, Lloyd Samuel	Palo Alto	S.Bus. gr.	633 Middlefield, P-p
A.B., Stanford, 1928			
[5]Pascoe, George Lahey	Martinez	Educ. 168+102	117 Toyon-*1855*
Pascoe, John Robertson	Palo Alto	LD 47+56	407 Encina-*1222*

Pasmore, John Lane Berkeley Med. gr. 2209 Buchanan, SF-sf
A.B., California, 1924
Patacsil, Paterno Caccam Bauang, P.I. Educ. 90·42–7 570 Alvarado
[12]Patchett, Hubert Allan San Luis Obispo Econ.112+7 Maybelle, M-Bx194,m
Patrick, David Lyall Palo Alto Engl. gr. 419 Webster, P-p
A.B., Iowa, 1922; A.M., Stanford, 1926
[4]Patrick, Roy Lavelle Corvallis, Ore. Educ. gr. 237 Toyon-*1295*
B.S., Oregon State Agricultural, 1925
Patten, Eleanor H. Alhambra Span. 7·181+144 Kap.Alpha Theta
A.B., Stanford, 1929
[5]Patten, Frank B., Jr. Pasadena Pol.S.99·82–3 Sg.AlphaEps.-*1305*
Patterson, Henry Richard Corvallis, Ore. C.E. gr. 345 Forest, P-p
B.S., Oregon, 1909
Patterson, Ruth Anita Fresno Educ.140+197 Al.OmicronPi-*1367*
[23]Patterson, Victor H. Wytheville, Va. LD 21–14 106 Encina-*913*
Patton, Thelma C. Santa Ana Psych.90·90+28 Gm.PhiBeta-*1337*
A.B., Stanford, 1929
Paul, Carl John Redwood City Pre-Med.21·160+96 20Brch,RC-rc
[4]Paul, Edith Cornell San Jose Educ. ‡ 219 S. 1st, SJ-sj
[2]Paulsen, Catherine Margaret Palo Alto Educ. gr. 664 Hamilton, P-p
A.B., Stanford, 1925
Pauly, Frederick Nye Los Angeles LD 88–5 Phi Gamma Delta
[4]Paxton, Jessie K. Pasadena Engl. gr. Madroño-*1664*
A.B., Stanford, 1919, A.M., 1921
[4]Paxton, Margaret Fresno Educ. gr. Madroño-*1664*
A.B., Fresno State Teachers College, 1923
Paxton, Roger McKinley Ashland, O. Educ. gr. Delta Chi-*1304*
A.B., Stanford, 1929
[4]Paxton, Winford Albert Duchesne, Utah Educ. gr. 625 Hamilton, P-p
B.S., Brigham Young, 1923
[4]Peacock, Alison Prescott Decoto Educ. gr. Decoto-d
A.B., San Jose State Teachers College, 1928
Peaker, Charles Ronald Yorkton, Sask. Chem. gr. 948 Ramona, P-p
B.S., Saskatchewan, 1925, A.M., 1927; Ph.D., Stanford, 1929
[23]Pearman, Fred Wolcott Los Angeles LD 30+27 402 Encina-*876*
Pearson, Gerald Leondus Stanford Univ. Phys. gr. 301 Union-*627*
A.B., Willamette, 1926; A.M., Stanford, 1929
Pearson, Harvey Jones Beverly Hills LD 74+26 Delta Chi-*1304*
Pearson, John St. Clair Santa Rita, N.M. S.Engr. 90·44+4 315 Everett, P-p
[12]Pearson, Lu Emily Palo Alto Engl. gr. 243 Everett, P-p
A.B., California, 1921
[23]Pease, Richard Arthur Hollywood Econ. 105+56 Kappa Alpha
Peasley, Margaret Los Angeles Pol.S. 9·168+13 Kp. Alpha Theta
[3]Peavy, George Darwin Corvallis, Ore. Educ. gr. Los Gatos-lg
B.S., Oregon State Agricultural, 1923
Peck, Edward Hurlbut Pomona LD 46+44 333 Encina-*95*
[34]Peck, John B. Honolulu, T.H. Soc.S. 154+71 Phi Sig. Kappa-*538*
[23]Peck, John Daniel San Francisco LD 31+44 235 Encina
Peck, John Higby San Francisco LD 92+146 218 Sequoia-*66*
[12]Peck, Templeton Pomona S.Let. 145+159 215 Encina-*95*
[4]Peckham, Doyle Starr Taft Engl. gr. 233 Addison, P-p
A.B., Stanford, 1923
Peckham, James Benjamin, Jr. San Jose Hist. 99·41+58 415 N. 15th, SJ-sj
[5]Peckler, Edward James Stockton Econ. 89·76+62 247 Alma, P-*1195*
[5]Pedden, John R. Grand Rapids, Mich. Pre-Med. 91+110 112 Bran'r-*1994*
Pedersen, Thorwald Visalia Hist. 105+110 947 Wav'ley,P-*1031*
Peery, Horace Taylor Ogden, Utah S.Bus. gr. 320 Union
A.B., Stanford, 1927, M.B.A., 1929

[5]P'ei, Chien A.B., Stanford, 1927, A.M., 1928	China	Bot. gr.	Chinese Club-*960*
[1]Pence, Leland Hadley	Redwood City	LD	634 Fulton, RC-rc
[4]Pendleton, James Henry A.B., Wichita, 1919	Wichita, Kans.	Educ. gr.	541 Princeton, M
[4]Pendleton, Philip Yancey	Phoenix, Ariz.	Law 48·115+16	309 Union
[12]Penfield, James Kedzie A.B., Stanford, 1929	San Francisco	Hist. 90·91+96	583 Salvatierra
Penfield, Louis Snow	Mill Valley	LD 45+20	236 Encina-*1442*
[4]Peniwell, Laura Hartman A.B., Arizona, 1924	Phoenix, Ariz.	Engl. gr.	565 Salvatierra-*2305*
[4]Peppin, Hazel Blythe	Honolulu, T.H.	LD ‡	279 Roble
[5]Percy, Walker	Los Angeles	LD 91–3	Zeta Psi-*B*
Percy, William Armstrong A.B., Stanford, 1928, J.D., 1929	Los Angeles	Law gr.	Zeta Psi-*B*
Perelli-Minetti, Mario Joseph	Delano	LD 91+105	Phi Kappa Psi
[4]Pérez, Elisa A.M., Kansas, 1927	Chicago, Ill.	Span. gr.	160 Roble
Perin, Raymond J.	Burlingame	S.Engr. 143+76	216 Branner-*2131*
Perren, Vernon Earl A.B., Stanford, 1929	San Jose	Econ. 88·92+15	418 Encina-*2668*
[4]Perry, Anna Frances A.B., Mills, 1929	Delleker	Engl. gr.	607 Gerona
Perry, Francis Berton	San Francisco	LD 96+84	316 Sequoia-*691*
[4]Perry, George Louis A.B., Upper Iowa, 1923	Sully, Iowa	Pol.S. gr.	270 Kellogg, P-p
[4]Perry, Mabel A.B., Kansas, 1916; A.M., Stanford, 1926	Hollywood	Hist. gr.	527 Cornell, M-*2624*
Perry, Robert Hazlett	Palo Alto	LD 88+34	Kappa Sigma-*1326*
Peters, Samuel Everett A.B., Maryville, 1921	Palo Alto	Educ. gr.	531 Harvard, M-*505*
Peters, Stanley Davis A.B., Stanford, 1928	Denver, Colo.	S.Bus. gr.	Sig.Alpha Epsilon-*1305*
Peterson, Harold W. A.B., Stanford, 1927, J.D., 1929	Portland, Ore.	Law gr.	556 Encina-*951*
Peterson, Joseph Lowery	Pueblo, Colo.	LD 90+82	Sigma Nu-*980*
[234]Peterson, Roy Gerald	Denver, Colo.	Pol.S.135·33+53	205 Emerson, P-p
[1]Peterson, Thomas J.	Royal Oak, Mich.	Soc.S.165+102	462SntaTresa-*1891*
[3]Petty, Claude Rowland	Oakland	Hist. 90·16+8	235 Emerson, P-p
[4]Petty, Mary A.B., Mills, 1920	Madera	Engl. gr.	574 Lasuen
Pfaff, Paul Lewis A.B., Stanford, 1929	San Diego	Engl. 102·90+62	560B Forest, P-p
Pfeffer, Karl H.	Frankfurt-am-Main,Ger.	Hist. gr.	570 Mayfield-*61*
[4]Pfrimmer, Vashti A.B., Iowa State Teachers College, 1924	Oakland	Educ. gr.	Roble
Phelps, Wilson Willets	Los Angeles	LD 92+47	Alpha Tau Omega
Philbrook, Warren Rutland	Modesto	S.Engr. 90·86–2	314 Sequoia-*1003*
[1]Philippi, Robert Louis A.B., Stanford, 1929	Norwalk	Ed.-G.A. 181+114	564 Univ., P-p
[12]Phillips, James Paul A.B., Colgate, 1916; A.M., Tennessee, 1928	Mayfield	Educ. gr.	1236 College, M-m
[4]Phillips, Viola Evelyn	San Francisco	Educ. ‡	378 Roble
[5]Pierce, Claire Mary	Los Angeles	Germ. 22·116+20	Al. Omi. Pi-*1367*
Pierce, Margaret	Los Angeles	Engl. 152+98	365 Roble-*1492*
Pierce, Robert Ernest, Jr.	Lindsay	LD 85–1	Delta Chi-*1304*
Pike, Thomas Potter	Los Angeles	LD 93+90	Alpha Delta Phi-*J*

Pillsbury, Arthur Francis Stanford Univ. C.E. gr. 433 Encina-*1301*
A.B., Stanford, 1928
Pillsbury, Elizabeth Marie Long Beach LD 89+61 Gamma Phi Beta-*1337*
Pinkston, Beth Tollan Los Angeles LD 85+145 AlphaOmicronPi-*1367*
[1]Pinneo, Harry Adelbert Alturas LD 0–16 29 Encina-*2494*
[5]Pinsdorf, Kate Matto Grosso, Brazil Hist. gr. Madroño
A.B., Smith, 1928; A.M., Stanford, 1929
[1]Pischel, Bradley Dart Salt Lake City, U. LD 97+6 Theta Xi
[1]Pison, Donato T., Jr. Molo, Iloilo, P.I. LD 61·81–10 711 Cowper, P-p
[12]Plate, Agnes Groves San Jose S.Biol. gr. 201 Roble-*2816*
A.B., Stanford, 1928, A.M., 1929
Plate, Phoebe San Jose Engl-P.Sp.9·141+173 103Rbl.-*2816*
Platt, Howard Charles San Francisco S.Engr. 136+29 141 Toyon-*2457*
[4]Platts, John Milton Fresno Educ. gr. 538 Lasuen
B.S., Rose Polytechnic Institute, 1899
Plumb, Jane Wheldon South Pasadena Phil.181+48 Kappa Kappa Gamma
A.B., Stanford, 1929
Plumb, Preston B., Jr. South Pasadena LD 43–10 119 Encina-*2697*
Poinsett, Howard Bouquet, Jr. Pinole LD 49+7 404 Encina-*1190*
Pollak, John Dannals Albany, Ore. Med. gr. 325 Union-*853*
A.B., Stanford, 1928
Pollard, Bernard B. Wayne, Neb. Econ. 36·56+26 228 Encina-*507*
[4]Pollard, Henry Lyon Chandler, Ariz. LD 238 Toyon
Pollock, Mary-Jane C. Bloomington, Ill. LD 89+68 Alpha Phi-*1387*
[4]Polster, Arthur H. Sedgwick, Colo. Educ. gr. 567 Lincoln, P-p
A.B., Central Wesleyan, 1920
Polverino, Joseph John San Jose Pol.S. 151+120 106 Branner
[5]Ponti, Joseph Angelo Vallejo LD 51+36 329 Encina-*2164*
[12]Pontius, William Byron Montague,Mich. Pol.S. 96·66–5 562 Encina-*2757*
[12]Poole, Barbara Denny Ithaca, N.Y. Fr. 66·119+7 Kappa Alpha Theta
A.B., Stanford, 1929
Poole, Robert William Redwood City Pol.S. 180+135 248 Wash., RC-rc
A.B., Stanford, 1929
Pope, Francis Sacramento Econ. 54·68–1 Chi Psi-*1648*
Pope, Norris Francis Santa Cruz LD 77+5 Sigma Alpha Eps.-*1305*
Porter, Andrew O. South Pasadena Pol.S. 141+132 118 Toyon-*2207*
Porter, Frank E., Jr. Salt Lake City, U. S.Engr. 90·52+53 221 Bryant, P-p
Porter, John Lemoyne Alma, Nebr. Chem. gr. 948 Ramona, P-*2057*
B.S., Princeton, 1926
Post, Janet Giles Berkeley Hist. 162+263 Chi Omega
[12]Post, Seraphim Fred Berkeley M.E. 198+240 Zeta Psi-*B*
A.B., Stanford, 1929
Post, Thomas Barnes Geneva, N.Y. LD 40+12 409 Encina-*1647*
Powell, Katharine Louise San Francisco Engl. 180+51 Kappa Alpha Theta
A.B., Stanford, 1929
Powell, Robert Jameson Alameda LD 73+10 Sigma Alpha Eps.-*1305*
Power, Maurice S. San Francisco LD 26·90+111 320 Sequoia
[4]Powers, Mary Louisa Fresno Educ. gr. 583 Lagunita-*1918*
B.S., California, 1924
[3]Powers, Marylyn Los Angeles LD 78+8 Kappa Alpha Theta
Powers, Maxine Louise Los Angeles LD 43+40 182 Roble-*2765*
Powers, Ralph Marion Pacific Grove Econ. 137+158 323 Sequoia-*914*
Poynter, William F. Davenport, Wash. LD 43+8 727 Addison, P-*712*
Poytress, William Henry San Jose Econ. gr. 785 Pershing, SJ-sj
A.B., California, 1916
[1]Prael, Charles Fredrick Astoria, Ore. Soc.S. 110·77+81 331 Encina-*912*
A.B., Stanford, 1929

Prager, Lawrence Henry A.B., Stanford, 1929	San Francisco	Econ. 84·96+12	407 Sequoia-*2291*
[2]Pratt, Anne Bertina A.B., Stanford, 1929	Fall Brook	Zoöl. 144·48+75	205 Roble
[12]Pratt, Charles Pearson A.B., Stanford, 1929	San Francisco	Hist. 180+12	515 Lytton, P-p
Pratt, Donald Roy	San Francisco	LD 95+110	407 Sequoia-*1103*
[1]Pratt, Norman U.	Belvidere, Ill.	Econ. 5·165+121	*232* Branner-*983*
Prescott, Walton A.B., Stanford, 1929	Berkeley	Pre-Cl. 135·46+6	Roble Ave., MP
Preston, John Beverly	Palo Alto	S.Engr. 124+34	62 Churchill, P-p
Preston, Mary Isabel A.B., Stanford, 1919, A.M., 1920	Santa Clara	Med. gr.	2512 Washington, SF-si
[4]Price, Eva Rebecca A.B., Chicago, 1904; A.M., California, 1925	Redlands	Span. gr.	158 Roble
[4]Price, Harriet	Reno, Nev.	Hist. ‡	242 Roble-*1665*
[1]Price, Henry B., Jr.	Stanford Univ.	C.E. 154–46	425 Tasso, P-*1305*
[5]Price, James Francis B.S., Kansas State Agricultural, 1927	Manhattan, Kans.	Law gr.	345 Forest, P-p
Price, John Basye A.B., Stanford, 1928, A.M., 1929	Stanford Univ.	Zoöl. gr.	532 Alvarado
[23]Price, Muriel	Palo Alto	Engl.89·35–11	1030 Hamilton, P-p
Price, Robert Maurice	Markleeville	LD 78–3	Theta Chi-*1383*
[12]Price, William Clay A.B., Stanford, 1929	Los Angeles	Law 180+4	228 Fulton, P-p
[12]Priest, Howard Lee	Oilfields	LD 63+0	411 Kipling, P-p
[234]Prime, Silas Burr A.B., Stanford, 1928	San Francisco	Hist. gr.	743 Homer, P-*1071*
[234]Prince, Richard N.	Alameda	Chem. 114–2	Phi Kappa Psi
Pringle, William Bull, Jr. A.B., Harvard, 1925	San Francisco	Law gr.	159 Emerson, P-*816*
[4]Prioleau, Dialthea Lee	San Francisco	LD ‡	170 Roble
Prior, William Wilson, Jr. A.B., Stanford, 1929	Escondido	Hist. 183+154	247 Toyon-*978*
[4]Priseler, Elizabeth Kathryn	Los Angeles	LD ‡	115 Roble-*515*
Prisinzano, Gandolpho	San Francisco	Pre-Med. 149+74	541 Encina-*605*
[12]Pritchard, Thomas Hubert	Arlington	LD sp. 16+0	Base Hospital, P-p
[4]Probasco, Barbara Sherman A.B., Stanford, 1927	Burlingame	Hist. gr.	Burlingame-*1325*
[4]Proctor, Phimister B.	Menlo Heights	LD 56+14	Menlo Heights-Bx994,p
[4]Pugh, William Richard A.B., San Jose State Teachers College, 1928	Santa Clara	Educ. gr.	Santa Clara-Box 42, sc
[4]Pulliam, Nolan Downing A.B., Central, 1925	Mesa, Ariz.	Educ. gr.	557 Lasuen-*1335*
Purcell, James Coughlin A.B., Stanford, 1928	Represa	Law gr.	226 Sequoia-*1242*
Purdy, Raymond	Modesto	Econ. 90·45+0	504 Encina-*2411*
Purkiss, Albert Cassius A.B., Stanford, 1929	Santa Maria	Econ. 23·157+15	Phi Delta Theta
[5]Purnell, George Roberts A.B., Stanford, 1927	Sacramento	Cl.Lit. gr.	507 Encina-*122*
Purvis, Donald T. A.B., Stanford, 1929	Johnstown, Colo.	Psych. 90·91+109	305 Sequoia-*975*
[1]Pushman, Thomas Hall A.B., Stanford, 1929	Chicago, Ill.	Soc.S. 100·80+56	211 Sequoia-*2372*
Puthoff, Eugene Thomas	San Bernardino	LD 90+34	129 Branner-*1089*
[12]Putnam, Albert George	San Francisco	Econ. 148+56	Phi Gamma Delta
Putnam, Barbara	Pasadena	Soc.S. 90·47+33	274 Roble-*2552*

Putnam, Thorington Caldwell — Exeter — LD 10·45+40 — 120 Encina-*1183*
Putnam, William Clement — Exeter — Geol. 191+149 — Theta Chi-*1383*
A.B., Stanford, 1929
Pyle, Dorothy Ethel — Woodland — LD 47·43+17 — 252 Roble-*50*
Pyle, John Hastings — Pasadena — Econ.84·56+14 — Beta Theta Pi-*1335*
Pyle, Lindley — St. Louis, Mo. — Phys. gr. — Kingscote-*536*
A.B., Michigan, 1901, A.M., 1902
Quarnstrom, Arthur A. — Sycamore, Ill. — S.Engr. 183+57 — 232 Branner-*1914*
A.B., Stanford, 1929
[4]Quayle, Elwood LeRoy — Oakland — Pol.S. 155–8 — 216 Toyon-*1093*
Queen, Greenville Burton — Louisa, Ky. — Bact. 180+136 — 540 Encina-*1064*
A.B., Stanford, 1929
Queen, William Foster — Louisa, Ky. — Bact. 185+82 — 506 Mayfield-*1064*
A.B., Stanford, 1929
[5]Querna, Milburn H. — Madison, Minn. — Pre-Med. 130+98 — Al. Tau Omega
[4]Quibell, Charles Hicks — Fresno — Bot. gr. — Pacific Grove-pg
A.B., Pomona, 1927
[5]Quigley, John Scott — Alameda — Bact.gr. — 341 Portola Way, P-*1305*
A.B., Stanford, 1926, A.M., 1929
Quigley, Richard Havelock — Oakland — LD 26+18 — 220 Encina-*1065*
Quinn, Dorothy Margaret — Stockton — Engl.-P.Sp. gr. — Al. Omi. Pi-*1367*
A.B., Stanford, 1928
Quinn, Edward Morgan — Stockton — Med. gr. — 2275 Jackson, SF-sf
A.B., Stanford, 1928
[234]Quinn, Emmet Aidan — Grand Junc., Colo. — Law gr. — Phi Gamma Delta
A.B., Stanford, 1926
[4]Quinn, Helen Veronica — San Francisco — Educ. gr. — 314 Roble-*597*
A.B., San Francisco State Teachers College, 1928
[12]Quinn, Thomas Brennan — Stockton — Law gr. — Sigma Nu-*1385*
A.B., Stanford, 1927, J.D., 1929
Quirk, Akeley Park — Los Angeles — LD 44+3 — 326 Encina-*2183*
Raaf, John Elbert — Pocatello, Idaho — Med. gr. — 2402 California, SF-sf
A.B., Stanford, 1926
Rachford, Nolan Eugene — Mountain View — LD 87–8 — 25A Loreto, MV-mv
[1]Radcliffe, William D. — Belen, N.M. — S.Biol. gr. — 525 Lytton, P-p
A.B., Arizona, 1928
Radcliffe, William Hickman — Palo Alto — Econ. 87·35–2 — 311 Portola, P-p
Radius, Walter Albrecht — San Francisco — LD 40+48 — 31 Encina-*942*
Radlin, Myron Leonard — Los Angeles — LD 45+5 — 200 Encina-*1804*
[4]Raentsch, Karl Ruprecht — San Francisco — LD ‡ — 113 Toyon
Ramsey, Henry Colwell — Arcata — LD 98+154 — 219 Sequoia-*2771*
Ramsey, William Maxwell — Hollywood — Chem. gr. — 207 Union-*2675*
A.B., Stanford, 1928
[4]Randall, Florence B. — San Diego — Educ. gr. — 178 Roble-*636*
A.B., San Diego State Teachers College, 1928
[1]Randol, Edwin Compton — Fresno — LD 84+82 — 524 Middlefield, P-p
[4]Raney, Edwin Albert — Morgan Hill — LD — Menlo Heights-*62*
[1]Rankin, Clark — Palo Alto — Pol.S. 152–4 — Al. Tau Omega-*1384*
Ranney, Charles R. — Cleveland, Ohio — LD 74+7 — Sigma Nu-*1385*
[234]Ranney, Rufus P. — Cleveland, Ohio — Hist. 167+38 — Sigma Nu-*1385*
[12]Ransdall, Harold Vincent — Burlingame — Geol. 90·21–5 — 4 E. Carol, B-b
Rantz, Lowell Addison — Placerville — LD 46+37 — 234 Encina-*2315*
[5]Raoul-Duval, Richard — Paris, France — Law gr. — 159 Emerson, P
A.B., Stanford, 1928
[12]Rathbun, Harry John — Stanford Univ. — Law gr. — 519 Encina-*2171*
A.B., Stanford, 1916, Engineer, 1920, J.D., 1929
Rathman, Theodore Singiser — Hollywood — Econ. 180+7 — Kappa Alpha
A.B., Stanford, 1929

Rawlings, Stuart Lamar	Piedmont	LD 23–6	Alpha Delta Phi-*J*
[5]Rawlins, Grove Allen	Willows	Pre-Med.132+61	Pacific Grove-pg
Ray, Alvin Wilton	San Francisco	LD 39+0	445 Encina
[4]Ray, Herndon Carroll	Palo Alto	Soc.S. 192+61	230 Kellogg, P-p
A.B., Stanford, 1929			
[5]Ray, John Wilbur	Los Angeles	Econ. 132+34	Theta Xi
[4]Ray, Thelma Tipton	El Centro	Ed.-G.A. gr.	710 Yale, M-m
A.B., California, 1921			
Raymond, Roy Henry	Petaluma	S.Bus. gr.	443 Kipling, P-p
A.B., Pomona, 1928			
Read, Jesse Wilmot	Tacoma, Wash.	Med. gr.	2180 Washington, SF-sf
A.B., Stanford, 1927			
Read, Robert DeLeo	Tacoma, Wash.	LD 92+28	Pacific Grove-pg
[12]Reagh, John Dallas, Jr.	Seattle, Wash.	LD 47+52	18 Encina-*884*
[12]Reasor, Charles Lewman	Los Angeles	Econ. 180+163	Theta Chi-*1383*
A.B., Stanford, 1929			
[4]Reavis, Glenn Dale	Clovis	Educ. gr.	666 Kellogg, P-p
A.B., College of the Pacific, 1926			
Recknagel, Carl Albert	Vallejo	LD 73+6	250 Branner-*2668*
[3c]Redeker, Harry Erwin	Mayfield	Chem. gr.	1627 College, M-m
B.S., Idaho, 1912; A.M., Stanford, 1928			
[1]Redfield, Sidney Carson	Roswell, N.M.	Chem. 50·69–16	410 Encina-*1158*
[4]Redford, Edward H.	Vacaville	Educ. gr.	628 Webster, P-p
A.B., State College of Washington, 1927			
[4]Rediger, Joseph L.	Chenoa, Ill.	Psych. gr.	133 Toyon-*805*
A.B., Bluffton, 1919			
Redman, F. Munro	Portland, Ore.	S.Engr. 99·42–7	430 Encina-*21*
Reed, Earl Elbert	Nampa, Idaho	Pol.S. 136+45	203 Sequoia-*1042*
Reed, Greta Louise	Youngstown, Ohio	LD 41+3	106 Roble-*2515*
Reed, James	Los Angeles	LD 47+47	327 Encina-*2824*
[4]Reed, Marian Elizabeth	Palo Alto	Engl. 96·47+56	525 University,P-p
Reed, Parker Clarke	Covina	LD 99+106	112 Toyon-*2665*
[12]Reed, Warren D.	San Jose	S.Engr. 90·98–7	1052 Brace, SJ-sj
[5]Reed, William Francis	San Francisco	Soc.S. 76·55+19	Chi Psi-*1648*
[4]Reed, Z. Blanche	Walla Walla, Wash.	Engl.-P.Sp. gr.	305 Roble
A.B., De Pauw, 1920			
[4]Reeda, Agnes	Chicago, Ill.	Psych. ‡	Staller Ct. Apts., P-p
Reeder, Anson McElree	Huntington Park	Soc.S.-Jn. 181+47	Kap. Sig.-*1326*
A.B., Stanford, 1929			
Reeder, Lorraine Caroline	Oakdale	Span. 187+228	Gm. Phi Beta-*1337*
A.B., Stanford, 1929			
[3d]Reene, Mary Elizabeth	Palo Alto	Educ. 135·32+33	401 Lytton, P-p
Rees, John H.	Los Angeles	Econ. 150–17	Alpha Delta Phi-*J*
[4]Reeve, Frank Driver	Albuquerque, N.M.	Hist. gr.	1850 Fulton, SF-sf
A.B., New Mexico, 1925, A.M., 1928			
[4]Reeves, Jonathan Floyd	Ft.Stockton,Tex.	Educ. gr.	522 Webster, P-p
A.B., Simmons, 1923			
[4]Regnart, Marjorie Jean	San Jose	Ed.-G.A. gr.	1013 Ramona, SJ-sj
A.B., San Jose State Teachers College, 1928			
Rehrig, B. Houston	Los Angeles	M.E. 5·190+97	Zeta Psi-*B*
A.B., Stanford, 1929			
Reich, August	Bakersfield	Med. gr.	2180 Washington, SF-sf
A.B., Stanford, 1928			
[4]Reich, Marion Ralph	San Francisco	LD	118 Encina
[4]Reich, Thomas	Bakersfield	LD ‡	2180 Washington, SF-sf
Reich, William Walter	Berkeley	Med. gr.	1007 Ordway, B-b
A.B., Philippines, 1917, B.S., 1919; A.M., California, 1921, Ph.D., 1923			

[5]Reid, George Alfred	Toronto, Ont.	Math. 45·50+67	Phi Delta Theta
[4]Reid, Janet Ella	Hurley, Wis.	Educ. gr.	Roble
A.B., Wisconsin, 1918; A.M., Minnesota, 1927			
[3]Reid, John T.	Palo Alto	Span. 168+272	545 Bryant, P-*986*
[4]Reid, Robert Morrison	Hayward	Educ. gr.	1345A, H-h
Graduate, San Jose State Normal, 1902; LL.B., Michigan, 1911			
[1]Reid, Sam C.	Santa Monica	LD	349 Hamilton, P-p
[4]Reimer, Gustav Adolph	Reedley	S.Biol. gr.	Pacific Grove-pg
B.S., Kansas State Teachers College, 1918			
Reily, John McClintic	San Bernardino	Econ. 33·147+36	406 Laurel, P-p
A.B., Stanford, 1929			
[4]Reindollar, Ted Con	San Rafael	LD	328 Union
Reinert, Stanley Goddard	San Francisco	Econ. 87·38–5	1027 Waverley, P-p
Rendtorff, Gertrude E.	Stanford Univ.	Educ. gr.	646 Alvarado-*1302*
A.B., Stanford, 1928, A.M., 1929			
Rennick, Howard Leroy	Mulvane, Kans.	Educ. gr.	1004 Emerson, P-p
B.S., Kansas State Teachers College, 1926			
[4]Renó, Dorothy Alice	San Mateo	Span. ‡	1140 Palm, SM-sm
Renton, Malcolm Joseph	Avalon	Econ. 90·93+81	237 Branner-*2138*
A.B., Stanford, 1929			
[4]Renwick, Helen Keeney	Sacramento	Psych. ‡	238 Roble-*1337*
[1]Renwick, William Bruce	Billings, Mont.	Law gr.	520 Union-*2756*
A.B., Minnesota, 1926; J.D., Stanford, 1929			
[12]Renzel, Ernest Henry	San Jose	Econ. 181+93	Sigma Nu-*1385*
A.B., Stanford, 1929			
Reppy, Joan	Los Angeles	LD 29+19	178 Roble-*30*
Rettig, Fred E.	Palo Alto	LD 87+18	118 O'Cnr., P-Bx 34B,p
Revell, John Harold	Los Angeles	Pre-Med. 116+22	Theta Xi
[5]Reynolds, Frank Chester	Chico	Pre-Med.90·36+19	317Sequoia-*940*
[3]Reynolds, Hazel A.	Ukiah	Engl.-P.Sp.‡29+25	252Roble-*1551*
[4]Reynolds, Helen Beatrice	San Francisco	LD ‡	1935 Emerson, P-p
[23]Reynolds, Helen North	Los Angeles	Ed.-G.A.12·170+113	M'loP'k-*1337*
A.B., Stanford, 1929			
[23]Reynolds, James Eugene	Pasadena	Econ. 182+90	Phi Delta Theta
A.B., Stanford, 1929			
Reynolds, Kenneth Mike	Pasadena	LD 89+20	Phi Delta Theta
Reynolds, Robert Perrin	Palo Alto	LD 91+37	Alpha Tau Omega-*1384*
Rhind, Ralph	Manhattan Beach	S.Biol. 90·90+21	Kap. Sigma-*1326*
A.B., Stanford, 1929			
Rhoades, Robert F.	Great Falls, Mont.	LD 48+18	321 Encina-*1691*
Rhode, Ellis Gray	Monroe, Wash.	Educ. gr.	711 Kingsley, P-p
A.B., Simpson, 1912; A.M., Stanford, 1929			
[34]Rhodes, Drusilla Hichborn	San Jose	Educ. gr.	248 S. 7th, SJ-sj
A.B., San Jose State Teachers College, 1926			
[5]Rhodes, Foster Bond	Pasadena	Econ. 173+107	Alpha Delta Phi-*J*
[23]Rhodes, Patricia Etheridge	Vallejo	Phil. 131+189	Kappa Alpha Theta
Rhodes, Robert Drake	San Jose	Educ. gr.	797 E. St. John, SJ-sj
A.B., San Jose State Teachers College, 1928			
Rice, Marjorie E.	San Diego	Pol.S. gr.	Delta Gamma-*1366*
A.B., Stanford, 1929			
Rice, Sidney S., Jr.	Los Angeles	LD 45+29	364 Encina-*2019*
Rich, Katharine Wiley	Berkeley	LD 85+52	Kappa Alpha Theta
[5]Richards, Dowell Spencer	Long Beach	LD 88 7	Delta Upsilon
[5]Richards, George L., Jr.	Los Angeles	Geol. 116+25	257 Toyon-*997*
Richards, G. Roberta	Lodi	Pol.S. 184+152	Sigma Kappa-*1327*
A.B., Stanford, 1929			
[4]Richards, Heber G.	Salt Lake City, Utah	Engl. gr.	1327 Alma, P-p
A.B., Utah, 1910; A.M., Chicago, 1922			

[1]Richards, Lynn S. Salt Lake City, Utah Law gr. 564 Encina-*515*
A.B., Brigham Young, 1925; J.D., Stanford, 1929
Richards, Mernon C. Long Beach S.Bus. gr. Delta Kappa Epsilon
A.B., Stanford, 1928
Richards, Robert LeG. Denver, Colo. Econ. 92·45–5 595 Seale, P-*552*
Richards, William Sidney San Jose LD 24·49+37 234 Encina-*878*
Richardson, Arthur Pawley Maui, T.H. LD 45+66 449 Encina-*2634*
Richardson, Baury B. Los Angeles S.Engr. 92·92+9 544 Encina
A.B., Stanford, 1929
[1]Richardson, Daniel Gaches Berkeley S.Engr. 108+51 Al.Kap.Lam.-*658*
[5]Richardson, Eri Horner, Jr. Palo Alto LD 48+5 552 Kellogg, P-p
Richardson, George C. San Francisco Med. gr. 2180 Washington, SF-sf
A.B., Stanford, 1927
[4]Richardson, Harvey L. Modesto Law gr. 541 Salvatierra
A.B., Michigan, 1927
Richardson, Hildur San Gabriel Soc.S. 137+89 Delta Gamma-*1366*
Richardson, James, Jr. Monrovia Econ. 33·147+53 406 Laurel, P-p
A.B., Stanford, 1929
Richardson, Palmer Minneapolis, Minn. LD 45+28 303 Encina-*1587*
[12]Richardson, Ralph Waldo Palo Alto S.Engr. 90–28 P.A.-RFD 241B, p
Richmond, Mary Lee Arlington LD 90+106 Gamma Phi Beta-*1337*
Ricketts, Charles Walter Los Gatos Law gr. 408 Sequoia-*645*
A.B., Stanford, 1928
Ricketts, Victor Lafayette Palo Alto Engl. 139+60 1020 Waverley, P-p
[1]Ricklefs, Clarence L. Palo Alto Engl. 37·89–7 404 Cowper, P-p
Ricklefs, Robert Ulric Palo Alto LD 94+15 15 Toyon-*O*
[4]Riddell, William L. Vancouver, B.C. Chem. gr. 1004 Emerson, P-p
A.B., Manitoba, 1925, B.S., 1926; M.S., Saskatchewan, 1928
Riddle, Sturgis McKinney Long Beach LD 97+157 26 Branner
Ridley, Ian Marston Alameda LD 75+75 135 Branner-*2647*
Ridley, Kenneth Felton San Jose M.E. 196+117 1161 Cherry, SJ-sj
A.B., Stanford, 1929
[4]Ridley, Lee Jerome San Jose LD ‡ 1161 Cherry, SJ-sj
[4]Riechers, Margaret Elaine Wheatland Educ. gr. 1041 S. 1st, SJ-sj
A.B., San Jose State Teachers College, 1928
[1]Riese, Elmer Frank Walnut Park Econ. 190+6 Phi Delta Theta
A.B., Stanford, 1929
Riley, Charles F. Klamath Falls, Ore. Law gr. 213 Union-*981*
A.B., Stanford, 1928
[3]Riley, John Branson Minneapolis, Minn. Pre-Med.107·15+4 305Hmltn.,P-p
[22]Riley, William Brand Portland, Ore. Hist. 132–8 Zeta Psi-*B*
Ring, Douglas H. Salt Lake City, Utah E.E. gr. 213 Sequoia-*938*
A.B., Stanford, 1929
Rintala, Rudolph A. San Francisco LD 42+32 244 Encina-*1721*
[4]Ripley, Cora Annette San Jose Educ. gr. 150 S. 15th, SJ-sj
A.B., Stanford, 1921
[4]Ripley, Virginia Yvonne Berkeley LD ‡ 202 Roble
[4]Ritchie, Eva Ojai Educ. gr. Madroño
A.B., Maryville, 1919
Rittenhouse, Emmet Louis Santa Cruz LD 46–7 209 Encina-*906*
Ritter, Lucy Elizabeth Stockton Soc.S. 136+137 369 Roble-*2785*
[1]Ritter, Ovid Herbert, Jr. Stockton Econ. 135·5–15 229 Union-*2785*
[5]Ritter, Robert Carbonell Ross Chem. 50·68+78 543 Byron, P-p
[1]Rittler, Elinor San Francisco LD 42·10–5 333 Lincoln, P-*1194*
[23]Rittler, Lida San Francisco Span. 180+49 Chi Omega
A.B., Stanford, 1929

[4]Rivard, Joseph Alfred Ulric — Mt. View — Span. gr. — St.Joseph'sCol.,MV-mv
A.B., St. Mary's, 1919
[1]Rivero, Manuel — Caracas, Venezuela — Geol. 30·129–35 — 450 Encina
[1]Riveroll, Sheldon — San Diego — Ec.-Acct. 184+113 — T.Del.Chi-*1828*
A.B., Stanford, 1929
Rixford, Emmet Lane — San Francisco — Med. gr. — 1795 California, SF-sf
A.B., Stanford, 1926
Rixford, Henry Covington — San Francisco — Med. gr. — 1795 California, SF-sf
A.B., Stanford, 1926
Roach, David John — Azusa — Educ. 90·43+65 — 206 Sequoia-*2744*
Roach, William Lloyd — Ponca City, Okla. — Educ. gr. — 527 Cornell, M-*41*
A.B., Oklahoma, 1920, A.M., 1922
[1]Roantree, James D. — San Francisco — LD 93+7 — Chi Psi-*1648*
[4]Robb, James Marion — Everett, Wash. — Educ. gr. — 540 Salvatierra
A.M., Michigan, 1905
Robbins, Carl Burton — Palo Alto — Econ. gr. — 610 University, P-*2564*
A.B., Stanford, 1924, A.M., 1925; M.B.A., Harvard, 1927; Ph.D., Stanford, 1928
Robbins, Gordon H. — San Bernardino — Econ. gr. — 543 Byron, P-p
A.B., Redlands, 1925
[4]Roberts, Chauncey Stephen — Palo Alto — LD — 141 Toyon
Roberts, Earl George — Eureka — LD 93+32 — 227 Waverley, P-p
Roberts, Gilbert Jay — Pomona — Med. gr. — 2402 California, SF-sf
A.B., Illinois, 1925
Roberts, James Morton — Seattle, Wash. — LD 98+147 — Phi Gamma Delta
Roberts, John Ferguson — Salinas — LD 79+7 — 151 Melville, P-*2229*
Roberts, William Abbott — Palo Alto — LD 82+0 — 540 Lowell, P-p
Robertson, George Domville — Los Angeles — Econ. 182+82 — 173 Mariposa, P-p
A.B., Stanford, 1929
Robertson, Jamie Logan — Visalia — Econ. 5·181+57 — Sigma Nu-*1385*
A.B., Stanford, 1929
[5]Robesky, Donald Albert — Palo Alto — Educ. gr. — 1307 University, P-p
A.B., Stanford, 1929
Robins, Earl M. — Los Angeles — Pol.S.92·45+26 — 759 Mdlfd.,P-*1783*
Robinson, Beverly Callicott — Hanford — LD 49+12 — 107 Encina-*2692*
Robinson, Edwin Gardner — Aurora, Ore. — Pre-Med. 148+70 — Delta Chi-*1304*
[23]Robinson, Elmo Arnold — Menlo Park — Phil. gr. — Menlo Park-Box 719, mp
B.S., Massachusetts Institute of Technology, 1909
Robinson, J. William — Los Angeles — Hist. 9·115+80 — Alpha Tau Omega
Robinson, Marjorie — Los Altos — LD 40+14 — Los Altos-la
Robinson, Russell — Palo Alto — LD 41+1 — 448 Encina-*1821*
Robinson, Russell Gideon — Santa Monica — M.E. gr. — 511 Encina-*686*
A.B., Stanford, 1928
[4]Robles, Edward Gabriel — Fairoaks — LD ‡ 12+0 — Cowper, P-p
Robson, George Bernard — Campbell — Pre-Med. 90·51+69 — 203 Sequoia
Roche, David Campbell — Chillicothe, Ohio — LD 50+8 — 139 Encina-*1915*
[124]Rode, Howard Schaeffer — Oakland — Pol.S. gr. — 301 Branner
A.B., Stanford, 1929
[2]Rode, John Kinsey — Etna — LD 34–21 — 481 Lytton, P-*2757*
Rode, W. Lincoln — Oakland — LD 91+59 — 301 Branner
[12]Rodegerdts, Carl Ernst — Stanford Univ. — Law gr. — 344 Serra-*628*
A.B., Stanford, 1927
Rodgers, Edward E. — San Luis Obispo — Cl.Lit. 45·137+135 — 116 Brnr.-*2127*
Rodgerson, Eleanor Burgess — Sacramento — Engl. 90·48+57 — 228 Roble-*2143*
[234]Rogers, Camillus W. — Menlo Park — Educ. gr. — MP-RFD 45, mp
A.B., Stanford, 1928
Rogers, John Baxter, Jr. — Beverly Hills — Soc.S.-Jn.34·157+105 — 304Tyn.-*958*
A.B., Stanford, 1929

[1]Rogers, John Millard A.B., Stanford, 1929	Los Angeles	Econ. 180+60	Delta Kappa Eps.
[12]Rogers, Josephine Rand A.B., Stanford, 1929	Palo Alto	Engl.-P.Sp.90·105+71	794Mel.,P-p
[4]Rogers, Ronald Howe	Stanford Univ.	Soc.S.-Jn. ‡	549 Salvatierra-*87*
Rogers, Vance C.	Burbank	S.Engr. 123+60	106 Branner-*1453*
[4]Rohden, Elizabeth Helen A.B., Washington, 1919	Bellevue, Wash.	Germ. gr.	360 Bryant Ct., P-p
Rohlf, Orville Arnold A.B., Minnesota, 1927	Minneapolis, Minn.	Law gr.	322 Union-*2353*
[2]deRoman, Vincent Ivan	San Francisco	LD ‡ 1–13	1423 Octavia, SF-sf
[4]Roney, Guy Joseph A.B., Stanford, 1917	S. San Francisco	Educ. gr.	553 Poplar, SSF-ssf
Rood, Reginald Shepard A.B., Stanford, 1927	San Diego	Med. gr.	St. Joseph's Hosp., SF-sf
Roodhouse, Thomas Greenlee	Palo Alto	LD 24·52+2	Sigma Chi-*628*
[4]Roos, John Mack	San Francisco	LD	118 Toyon
[4]Rorden, Louis Maurice	Petaluma	LD	311 Union-*1098*
Rosasco, John Loring A.B., Stanford, 1929	Healdsburg	Pre-Cl.52·170+103	209 Union-*1172*
[2]Roscoe, John Philip	Upper Mattole	Math. 11·151+187	Union
Rose, Alice Madeleine A.B., Stanford, 1928	Newman	Hist. gr.	105 Roble
Rose, Ralph Stanley A.B., Stanford, 1929	Newman	C.E. 193+157	103 Sequoia
Rose, Robert Harold A.B., Indiana, 1906	Otwell, Indiana	Geol. gr.	211 Union-*555*
Roseberry, Ruth Sybil	Los Banos	LD 93+77	303 Roble-*2153*
Rosenberg, Jean	Kansas City, Mo.	LD 46+23	255 Roble-*823*
Rosenberry, John M.	Coeur d'Alene, Ida.	LD 89+12	Phi Sigma Kappa-*538*
Rosenblatt, Irving S., Jr.	San Francisco	LD 84+99	235 Toyon-*1907*
[2]Rosene, Arthur Herman	Boise, Idaho	LD 68·15+0	832 Kipling, P
[12]Rosenstein, Samuel W.	Brooklyn, N.Y.	LD 49·33–5	405 Encina-*635*
Ross, Donald A. A.B., Stanford, 1929	Tulsa, Okla.	S.Engr.135·49+37	Phi Kp. Psi-*993*
[4]Ross, Gordon	Los Angeles	LD	108 Encina
[12]Ross, Howard Delos A.B., Stanford, 1928	San Jose	E.E. gr.	Phi Sigma Kappa-*538*
Ross, John William	Corte Madera	Law 143+3	Phi Kappa Sigma
Ross, Lydia Goodwin	Phoenix, Ariz.	LD 69·44+62	258 Roble-*2226*
Ross, Neil Bramlet	Los Angeles	LD 91+30	223 Toyon-*2763*
[5]Rossarini, Catherin Mary	Truckee	Econ. 113+103	Del. Del. Del.-*1325*
Rothberger, Matthew M. A.B., Stanford, 1929	Newark, N.J.	Pol.S. 120·60+33	324 Emerson, P
Rothert, Harlow Phelps	Los Angeles	Econ. 123+124	Beta Theta Pi-*1335*
Rott, Reuben Paul A.B., Stanford, 1929	Lodi	Econ. 90·93+82	304 Union-*1852*
[5]Roumm, Morris	Flint, Mich.	Hist. 102·32+41	171 Everett, P-p
Routt, Milton A.B., Stanford, 1928	San Jose	Phil. gr.	311 S. 6th, SJ-sj
[5]Row, Martin Armel A.B., Stanford, 1924	San Antonio, Tex.	Law gr.	330 Union-*577*
Rowe, Melvin John, Jr.	Norwalk	Pre-Med. 141+98	Theta Xi
Rowe, Robert David	San Mateo	LD 94+81	315 Sequoia-*891*
Rowell, Barbara Lois	Berkeley	Ed.-G.A.88·43+45	Alpha Phi-*1387*
[2]Rowell, Cora Winifred A.B., California, 1923	Berkeley	Hist. gr.	530 Webster, P-p

Rowland, Wilbur Hunt	Palo Alto	Pol.S. 163+64	251 Hawthorne,P-p
Rowley, Milton Harper	Erie, Pa.	Econ. 91·50+23	Phi Delta Theta
[1]Rowley, Russell Everett	Glendale	Soc.S. 122·10–21	451 Encina-*2613*
Rozeboom, Egbert A.	Mayfield	LD 55·59+13	656 Bowdoin,M-*1874*
Rubenstein, Victor	Hollywood	LD 7·47+37	336 Encina-*1483*
[4]Ruby, Charles Leroy	Carthage, Ind.	Educ. gr.	211B Oregon, P-p
A.B., Central Normal, 1925			
[1]Rudé, Jack	San Francisco	Law gr.	333 Union-*1694*
A.B., Stanford, 1928			
[4]Rudé, Miriam	San Francisco	LD	Roble
[4]Ruffa, Edward Joseph	San Diego	Educ. gr.	313 Toyon-*2398*
A.B., San Diego State Teachers College, 1927			
Ruling, F. Charles	Atherton	S.Engr. 191+106	MP-Box 280, mp
A.B., Stanford, 1929			
Rumbley, Jane Elizabeth	Los Angeles	Geol. 82·18+11	220 Roble-*2444*
[4]Rummich, Evelyn Pauncer	Bakersfield	Span. gr.	Roble-*556*
A.B., Redlands, 1927			
[1]Rumwell, Arnold	San Francisco	Law 164+47	222 Union
[5]Rumwell, Reginald	San Francisco	Econ. 163+13	Alpha Sig. Phi-*1357*
[4]Runyan, Walter LeRoy	Berkeley	Educ. gr.	759 Middlefield, P-p
A.B., Wabash, 1902; B.D., Chicago, 1907			
Ruppé, Donald E.	Los Angeles	Law gr.	224 Sequoia
A.B., Stanford, 1928			
Rusk, Glenn Orde	Ferndale	S.Engr. 90·47+26	374 Melville,P-p
Russ, Donald Lawrence	San Francisco	LD 73+17	Chi Psi-*1648*
[234]Russ, Fred Mills	San Francisco	Hist. 139+3	Chi Psi-*1648*
[234]Russell, Albert Mitchell	San Francisco	LD 30+8	248 Encina-*2683*
[1]Russell, Eugene S.	Auburn	Econ. 189+79	426 Encina-*1153*
A.B., Stanford, 1929			
[4]Russell, Joy Alden	Randle, Wash.	Educ. gr.	544 Webster, P-p
B.S., Oregon State Agricultural, 1926			
[2]Russell, Leroy Burnett	Stanford Univ.	LD 51–31	28 Branner
[4]Russell, Richard Alfred	San Francisco	Soc.S.-Jn. ‡	2101 Sac'to, SF-sf
[1]Russell, Wilfred William	Auburn	LD 89+18	611 Waverley, P-*821*
[1]Russell, William Francis	Highland	Psych.90·91+109	108 Sequoia-*1876*
A.B., Stanford, 1929			
Rust, Frederick Farlow	Everett, Wash.	LD 46+42	324 Encina-*1722*
Rutherford, Findlay de P.	Santa Barbara	Med. gr.	2430 Fillmore, SF-sf
A.B., California, 1926			
[4]Ryan, Elizabeth Lunney	Sacramento	LD 19–8	255 Roble-*2487*
Rytand, David A.	San Francisco	Pre-Cl.187+245	245 Branner-*1006*
A.B., Stanford, 1929			
[12]Sachse, Franz Robert	Pasadena	LD 78+37	Delta Tau Delta-*1363*
[4]Sacknitz, Alvia	Lewiston, Idaho	Fr. gr.	168 Roble
A.B., Whitman, 1923			
[23]Safier, Benno	San Francisco	LD 86+57	800 University, P-p
[12]¶Safier, Fred J.	New York, N.Y.	Phil. 180+240	553 Salvatierra
Sagal, Richard Edward	Los Angeles	Econ.93·49+47	741Addison,P-*1087*
[5]Sahyun, Melville	Santa Barbara	S.Biol. gr.	611 Waverley, P-p
A.B., American University (Syria), 1916			
[4]St. John, William Errle	Fresno	Engl. gr.	133 Toyon-*623*
A.B., Oregon, 1912; A.M., Stanford, 1921			
[3]Salcedo, Daniel Magno	Manila, P.I.	Educ. gr.	635 Bryant, P-*2695*
Ph.B., Chicago, 1922; A.M., Columbia, 1923			
[5]Salinger, Herman	Mayfield	Germ. gr.	682 Amherst, M-*988*
A.B., Princeton, 1927; A.M., Stanford, 1929			

[1]Salinger, Nelda L. A.B., Stanford, 1929	Mayfield	Phil.135·46+66	682Amherst,M-*988*
[5]Salsman, Byrl Richard A.B., Stanford, 1928	Palo Alto	Law gr.	652 Channing, P-p
[4]Salt, William Haslem	Menlo Park	LD ‡	584 Lasuen-*1828*
Salzer, Herbert Carl	Santa Monica	LD 44+46	115 Encina-*2133*
Sampson, John Philip A.B., Southern California, 1925	San Francisco	Med. gr.	2300 Webster, SF-sf
Sampson, Kenneth Vieth	Piedmont	Econ. 29·96+3	Phi Kappa Psi
[12]Sanborn, Carrol M.	Upper Lake	Pre-Med. 107+28	211 Toyon-*605*
[4]Sandholdt, John Peter, Jr.	Monterey	Pre-Med. ‡	236 Toyon-*512*
Sands, Lester Bruton A.B., Stanford, 1929	Mesa, Ariz.	Soc.S.-Jn.128·96+9	234Brnr.-*1524*
¶Sanford, Frances G. A.B., Stanford, 1929	Burlingame	Engl. 199+297	237 Roble-*2384*
[12]Sano, John Hiroshi A.B., Stanford, 1929	San Francisco	Chem. 183+17	Japanese Club-*598*
Sapero, James Joseph A.B., Stanford, 1928	San Francisco	Med. gr.	2275 Jackson, SF-sf
Sapiro, Nathan Avrom A.B., Stanford, 1928	Stockton	Med. gr.	2275 Jackson, SF-sf
Sarau, Christian Anton	Riverside	Soc.S. 54·92+85	558 Encina-*1285*
Saroyan, Suren M. A.B., Stanford, 1927, J.D., 1929	Fresno	Law gr.	Menlo Park-*1020*
[4]Sattgast, Charles Richard B.S., Illinois, 1923; A.M., Stanford, 1926	Greeley, Colo.	Educ. gr.	721 Columbia, M
[12]Sauers, George Elvin	Port Orford, Ore.	LD 60+32	1234 Emerson, P-p
Sauliere, Frank R. A.B., Stanford, 1929	San Jose	Pol.S.180+84	114 Toyon-*1855*
Saunders, Gilbert Buff A.B., Stanford, 1927	Bay City, Mich.	S.Bus. gr.	302 Branner-*523*
[5]Saunders, John Henry, Jr.	San Francisco	Econ. 124+47	Phi Kappa Psi
Sauter, John Baldi	San Francisco	LD 25+47	324 Sequoia-*811*
Savage, Edward Labadie	Reno, Nevada	LD 32+7	106 Encina-*1084*
[3]Savage, Meredyth	San Bernardino	Engl.-P.Sp. 126·13+5	Roble-*532*
Savage, Philip M., Jr. A.B., Stanford, 1929	San Bernardino	Zoöl. 56·124+29	532 Univ., P-p
Sawyer, Norman Davies	Los Angeles	LD 41+34	328 Encina
[23]Sawyer, Robert Sheldon	Los Gatos	Econ. 106·31+38	222 Sequoia
[12]Sayre, Enoch Franklin A.B., Simpson, 1924	Indianola, Iowa	Law gr.	626 Gilman, P-p
[5]Scannell, Ruth Hamilton A.B., Smith, 1915	Palo Alto	Soc.S. gr.	2411 Waverley, P-p
Scatena, James Almer	Yerington, Nev.	LD 44+34	1556 Webster, P-p
Scattergood, Elizabeth H.	Los Angeles	Hist. 144+114	Del. Del. Del.-*1325*
[1]Schaafsma, William Thomas	Santa Rosa	LD 65–11	302 Sequoia-*1014*
Schaefer, Peter Charles, Jr.	Denver, Colo.	LD 39·48–7	323 Encina-*1467*
[12]Schanck, Francis Raber	Portland, Ore.	LD 52+0	Zeta Psi
[4]Schatz, Betty Lee A.B., Fresno State Teachers College, 1926	Fresno	Educ. gr.	717 Bryant, P-p
[4]Schatz, Clarence Raymond A.B., Fresno State Teachers College, 1928	Fresno	Educ. gr.	717 Bryant, P-p
Schatz, Otto Carl	Bakersfield	LD 37–9	116 Encina-*2213*
[124]Scheidecker, Albert F. Jr. A.B., Stanford, 1926	Sebastopol	Law gr.	302 Union-*1170*
[12]Schell, Fred W.	San Francisco	LD sp. 37–3	109 Encina-*1002*
[5]Schick, Joseph Abraham	San Francisco	Pre-Med. 92+75	404 Sequoia-*1088*

Schickler, Eugene — San Francisco — LD 44+60 — 116 Encina-*587*
Schilder, Arthur Joseph — Santa Paula — Pol.S. 180+42 — 544 Encina-*897*
A.B., Stanford, 1929
Schlegel, Henry Kirby — Los Angeles — LD 42+18 — 347 Encina-*1443*
[124]von Schlegell, Frederick, Jr. — Pasadena — LD sp. 24·85+4 — Zeta Psi-*B*
[4]Schlein, Walter Charles — Fresno — Educ. gr. — 590 S. 15th, SJ-sj
A.B., Stanford, 1926
[12]Schmid, Clarence Lincoln — Palo Alto — Econ. 86·95+34 — 235 Emerson, P-p
A.B., Stanford, 1929
Schmidt, David Gordon — Fresno — Med. gr. — 2323 Sacramento, SF-sf
A.B., Stanford, 1928
[4]Schmidt, Mary — Nevada City — Educ. ‡ 18+6 — 222 Roble
[4]Schock, Pearl — Miami, Ariz. — Ed.-G.A. 135·12+8 — Roble-*2208*
[12]Schofield, Mary Lusia — Palo Alto — Hist. 188+336 — 751 Channing, P-p
A.B., Stanford, 1929
Schoolfield, Harrison, Jr. — Portland, Ore. — S.Engr.52·138+110 — 217 Brnr.-*1266*
A.B., Stanford, 1929
[4]Schortgen, Anne L. — Oakland — Educ. gr. — 581 Pine, PG-pg
A.B., San Jose State Teachers College, 1928
Schreck, Edwin Arthur — Aztec, N.M. — Educ. gr. — 136 Harriet, P-p
A.B., Denver, 1916, A.M., 1917; A.M., Columbia, 1923
[4]Schreibeis, Charles D. — Story, Wyo. — Hist. gr. — 230 Bailey, MV-mv
A.B., Northern Arizona State Teachers College, 1929
Schreiman, Raymond D. — Sacramento — S.Engr. 94·94+60 — 228 Sequoia-*110*
A.B., Stanford, 1929
Schuck, Lillian — Palo Alto — LD 76+134 — 30 Churchill, P-p
Schuck, Victoria — Palo Alto — Pol.S. 135+248 — 30 Churchill, P-p
[3]Schulte, Antoinette Lacoste — San Francisco — LD 9·76+33 — Al. Omicron Pi-*1367*
[2]Schulz, Carl Robert — San Francisco — Law gr. — 27 Alhambra, SF-sf
A.B., Stanford, 1926, J.D., 1929
[5]Schulz, Clarence Anton — San Francisco — Pol.S. 129·38–2 — 319 Alma, P-p
[1]Schumacher, Leopold C. — Lucerne, Switz. — S.Engr.130·52+33 — 325 Union-*2352*
A.B., Stanford, 1929
[4]Schumacher, Marion Ruth — Baldwin Park — Educ. gr. — 103 Roble
B.S., Columbia, 1928
Schwafel, Jacob T. — San Luis Obispo — Econ. 136+142 — 257 Toyon-*2022*
Schwartz, Irving — Napa — Pre-Med.106+43 — 127Branner-*2108*
Schwartz, Samuel S. — San Francisco — S.S.-Jn.90·90+29 — 858 32dAv,SF-sf
A.B., Stanford, 1929
[4]Schwindt, Martin D. — Ft. Morgan, Colo. — Educ. gr. — 219 Toyon-*543*
A.B., Carleton, 1927
[4]Scofield, Eugene Cottle — Palo Alto — Zoöl. gr. — 832 Lighthouse, PG-pg
A.B., Stanford, 1928
Scott, Charles Craven — Twin Falls, Idaho — Hist. gr. — Kappa Sigma-*1326*
A.B., Stanford, 1927, A.M., 1929
Scott, Elizabeth — Portland, Ore. — LD 37–12 — 104 Roble-*85*
[4]Scott, Esther Anna — Santa Clara — Educ. gr. — 1597 Harrison, SC-sc
A.B., San Jose State Teachers College, 1928
Scott, Paul Taplin — Arcadia — LD 44+0 — 426 Encina-*1941*
Scott, Robert Weller — S. San Francisco — Law gr. — Perry Way, MP-*2491*
A.B., Stanford, 1928
[4]Scott, Vera — Birmingham, Ala. — Engl. gr. — 150 Roble
A.B., Howard, 1927
Scott, William P., Jr. — San Francisco — LD 84+17 — Alpha Sigma Phi-*1357*
[1]Scotten, Arthur Fleming — Pasadena — Cl.Lit.10·170+340 — 236Branner-*882*
A.B., Stanford, 1929
Scripps, Fredrick Tudor, Jr. — San Diego — LD 89+16 — Zeta Psi-*B*
Scully, William Stephen — Los Angeles — Law gr. — 512 Encina-*1964*
A.B., Loyola, 1927

Seale, Barbara	Palo Alto	Soc.S. 116·53–6	Pi Beta Phi-*1918*
Seaman, John Allen	Escalon	LD 79+3	16 Branner-*1616*
Seaman, Wareham Clark A.B., Stanford, 1929	Escalon	Soc.S. 185+65	301 Branner-*1288*
Sears, John Alden	Seattle, Wash.	LD 40+2	344 Encina-*1061*
[5]Sears, Robert Richardson	Palo Alto	Psych.182+142	739Clmbia,M-*1176*
[4]Seashore, Sigfrid H.	Iowa City, Iowa	Psych ‡	355 Kellogg, P-*2782*
[1]Sedgwick, Mary L. B.S., Iowa State, 1928	Waterloo, Iowa	Germ. gr.	Roble-*1834*
[1]Segel, David A.M., Columbia, 1922	Long Beach	Psych. gr.	682 Columbia, M-*2252*
Seidenfeld, Morton Alfred B.S., Washington, 1927	San Francisco	Med. gr.	514 Encina-*1973*
[23]Seitz, Frederick	San Francisco	LD 32+37	310 Encina
Selden, Caroline McCreary A.B., Stanford, 1929	Erie, Pa.	Engl. 90·92+65	Pi Beta Phi-*1918*
[5]Selle, Wilbur Arthur A.B., Occidental, 1925; A.M., Stanford, 1926	Phoenix, Ariz.	Phyl. gr.	506 Encina-*1435*
[4]Sellick, Charles Watson A.B., Chico State Teachers College, 1927	Nord	Educ. gr.	550 Lasuen-*628*
Sellman, Roland A.B., Stanford, 1929	San Francisco	Econ. 48·136+5	Kappa Alpha
[5]Sen, Chih-Yuan	Kweichow, China	Pol.S. 90·47–5	Chinese Club-*705*
Senior, Colin Frank	Centerville, Iowa	LD 88+22	112 Branner-*1107*
[4]Seppi, Rudolph Henry	Buckley, Wash.	Educ. ‡	251 Toyon-*2796*
[12]Service, Newell Turner	Ceres	Econ. 89·91–3	429 Encina-*2216*
[8]Sether, Victor Christian A.B., Oregon, 1921; A.M., Stanford, 1928	San Francisco	Econ. gr.	5150 Geary, SF-sf
[5]Severance, Harold L.	Great Falls, Mont.	LD 30+30	248 Encina-*1563*
[4]Severance, Hayward Merriam B.S., California, 1910, M.S., 1914	Southgate	Educ. gr.	136 Encina-*1000*
[4]Seward, Raymond Sanford B.S., Pomona, 1912; A.M., California, 1921	Berkeley	Phys. gr.	5 Union-*501*
Sexson, Paul Alexander	Phoenix, Ariz.	Hist.131+21	1465 Webster,P-*1326*
[4]Shambaugh, Charles Gilbert A.B., Earlham, 1917	Mayfield	Educ. gr.	739 Columbia, M-m
[5]¶Shapovalov, Leo	Riverside	S.Biol. 141+152	410 Sequoia-*32*
[124]Sharp, James Benjamin A.B., California, 1922, A.M., 1926	San Francisco	Econ. gr.	Peninsula Sch., MP-mp
Sharp, James Meikle	Santa Paula	LD 84+62	312 Toyon-*2145*
Sharp, John Chester A.B., Stanford, 1926	San Francisco	Med. gr.	2201 California, SF-sf
[4]Sharp, Luther A.B., Southern California, 1917	Stockton	Econ. gr.	135 Wilson, P-p
[4]Sharp, Stanley L. A.B., Utah, 1929	Salt Lake City, Utah	Germ. gr.	Menlo Heights-*517*
[12]Shattuck, J. George A.B., Stanford, 1928	Menlo Park	C.E. gr.	137Middle,MP-Bx791,mp
Shattuck, Keith C.	Palo Alto	LD 90+35	345 Forest, P-*2822*
[5]Shattuck, William Lutz	San Francisco	Econ. 120+36	Phi Kappa Psi
Shaull, Ethel Mae A.B., Stanford, 1924	Glendale	Med. gr.	2321 Sacramento, SF-sf
¶Shaw, Edward S. A.B., Stanford, 1929	Palo Alto	Econ. 180+313	33Enc.Av.,P-Bx8,p
Shaw, Louis deHaven A.B., Stanford, 1929	South Pasadena	Engl. 185+47	743 Homer, P-*1875*
Shaw, Philip M.	Palo Alto	S.Engr. 155+11	555 Kellogg, P-p
Shaw, William Lawrence	Sacramento	Pol.S. 90·54+25	514 Alvarado-*1185*

[4]Shawe, Hamilton B. B.S., Oregon State Agricultural, 1924	Gardnerville, Nev.	Educ. gr.	728 California, M-m
[2]Shearer, John Paul	Palo Alto	LD sp. 9–6	1 Crescent Dr., P-p
Shedd, Louise Dawes A.B., Stanford, 1928	San Francisco	S.Biol. gr.	361 Roble-*681*
[1]Sheffield, Eugene Sherwood, Jr.	Napa	LD 80–10	419 Encina-*1924*
[4]Sheldon, Donald R. B.S., Kansas State Teachers College, 1927	Holbrook, Ariz.	Educ. gr.	551 Hanover, M-m
Shepherd, David A.B., Utah, 1918; A.M., Stanford, 1924, Ph.D., 1929	Logan, Utah	Zoöl. gr.	Menlo Heights
Shibley, George Edward	Long Beach	LD 88+91	656 Bryant, P-*101*
Shibley, Wadieh S.	Long Beach	LD 86+35	656 Bryant, P-*101*
[12]Shidler, George F.	Torrance	LD 9–21	19 Encina-*2262*
Shidler, John Ashton	Torrance	LD 38–17	19 Encina-*2262*
[124]Shigeta, Mitsuharu A.B., College of the Pacific, 1927	Tokyo, Japan	Soc.S. gr.	839 Emerson, P-p
Shinbo, Hachiro A.B., Stanford, 1929	Seattle, Wash.	Bact. 133·47+18	Japanese Club-*598*
[1]Shinn, Joseph Clark, Jr.	Niles	Econ. 109·79–17	435 Encina-*527*
[4]Shipkey, Harry Hector A.B., Stanford, 1926	Salinas	Educ. gr.	217 Madroño, P-*1326*
[4]Shipp, Frederic Thomas A.B., Stanford, 1922	San Jose	Educ. gr.	1358 Shasta, SJ-sj
Shipp, Robert T.	Battle Creek, Mich.	Chem. 96·44+40	Kingscote
[3]Shippey, Mervyn G.	Visalia	Hist. 90·13+0	777 Bryant, P-*1993*
Shirley, J. Chilton A.B., Stanford, 1929	Grand Canyon, Ariz.	Hist. 98·89+41	226 Toyon-*2397*
Shively, Betty Theresa	Portland, Ore.	Hist. 152+19	Chi Omega
Shively, R. Dariel	Bakersfield	LD 91+8	362 Roble-*1946*
[4]Shockley, William B.	Los Angeles	LD ‡	318 Union-*1787*
Shoemaker, Rosemary	Los Angeles	Pre-Med. 147+157	327 Roble-*1543*
Shoenhair, Maxine Mabel	Los Angeles	Hist.43·92+38	Kappa Alpha Theta
[23]Shoenhair, Theodore K.	Los Angeles	Law 177–5	Menlo Park-RFD, mp
[4]Shoesmith, Earl Byron	Chico	Educ. ‡ 52+9	Stanford Univ.
[5]Shore, Evelyn A.B., Stanford, 1929	Hollister	Hist. gr.	Chi Omega
Shortridge, John G. A.B., Stanford, 1929	Menlo Park	Pol.S.182+41	M'lo P'k-Bx 682,mp
Shorts, Bruce	Seattle, Wash.	LD 90+35	Delta Kappa Epsilon
[234]Shott, John G. A.B., Iowa, 1927	Birmingham, Iowa	Econ. gr.	224 Union-*1194*
Shoup, Frances Elizabeth	Los Altos	Pol.S. 138+75	Kappa Kappa Gam.
[12]Shoup, Jack Wilson A.B., Stanford, 1928	Los Altos	S.Bus. gr.	Los Altos-la
Shoup, Louise A.B., Stanford, 1929	Los Altos	Engl. 180+202	Kappa Kappa Gam.
Shove, Maynor Ben	Pasadena	LD 89+71	Phi Delta Theta
[12]Shrader, James N.	Lynwood	LD 23+6	403 Encina
[1]Shreve, Charles Henry	Long Beach	LD 79–16	241 Hawthorne, P-*833*
Shumaker, Phil William A.B., Stanford, 1926	Los Angeles	Med. gr.	1202 Hampshire, SF-sf
Shuman, Marian	Los Angeles	LD 44·45+48	307 Roble-*40*
Shupp, Elizabeth	Merion, Pa.	Phil. 90·47+34	230 Roble-*2443*
Shupp, Kenneth Reed	Merion, Pa.	Phil. 146+31	Chi Psi-*1648*
[3]Sibbett, Edward H. A.B., Stanford, 1929	Provo, Utah	Soc.S. 44·139+125	Zeta Psi-*B*

Sibbett, Ewing A.B., Stanford, 1927, J.D., 1929	Provo, Utah	Law gr.	Zeta Psi-*B*
[4]Siebrecht, Adolph Earl	San Francisco	LD	131 Toyon-*522*
[1]Siechert, Earl Paul	Ontario	Pre-Med.90-10–21	305 Lytton, P-p
Siegfried, Joseph H.	Kennewick, Wash.	LD 48+15	30 Encina-*2038*
Siegfried, Nanelia	Palo Alto	S.Let. 134+154	310 Waverley, P-p
Siegfried, Victor	Palo Alto	S.Engr.152+106	310Waverley,P-p
Siegfried, Victoria	Palo Alto	LD 81+51	310 Waverley, P-p
[3]Sigurdson, Larus Arthur M.D., Manitoba, 1927; A.M., Stanford, 1929	Palo Alto	Anat. gr.	352 Middlefield, P-p
[5]Sigurdsson, Stefania A.B., Manitoba, 1925; A.M., Columbia, 1927	Winnipeg, Canada	Phyl. gr.	353 Lytton, P-p
Silliman, Julian Winthrop	Palo Alto	S.Engr. 139+122	1160 Bryant, P-p
Silliman, Ruth Elizabeth A.B., Stanford, 1929	Palo Alto	Hist. 193+239	Kappa Alpha Theta
Silliphant, Wm. M. A.B., Southern California, 1926	Hunter River, Can.	Med. gr.	Mt. Zion Hosp., SF-sí
[4]Silsbee, Eva A.B., San Jose State Teachers College, 1929	Sacramento	Educ. gr.	221 Roble
Silva, Will A.B., Stanford, 1929	Half Moon Bay	S.Engr. 90-93+35	104 Sequoia
[4]Silver, Rafael von Heim	Oakland	LD ‡	118 Encina
[6]Silverman, Milton Morris	Piedmont	Phys.S.132+120	230 Branner-*2821*
[23]Silverthorn, Richard Harvey B.S., Purdue, 1915	Palo Alto	Pol.S. gr.	565 Hamilton, P-p
Silvestri, Joseph Paul A.B., Stanford, 1929	San Francisco	C.E. 183+83	107 Branner-*1557*
Simatovich, Anthony P.	San Francisco	S.Engr. 134+36	218 Toyon
Simatovich, Nicholas J.	San Francisco	LD 35–21	304 Encina
Simkins, William	Manhattan Beach	Econ. 134+98	Zeta Psi-*B*
Simon, Edwin J. A.B., Stanford, 1929	San Francisco	Engl. 191+106	245 Toyon-*1574*
[12]Simon, Oscar Robert A.B., Pittsburgh, 1928	Pittsburgh, Pa.	Law gr.	Encina-*1832*
Simon, Ralph Allen	San Francisco	LD 45+7	225 Encina-*1574*
[23]Simon, William John	El Paso, Tex.	S.Engr. 118+84	Phi Kappa Sigma
Simpson, Charles Jerry	Los Angeles	LD 70+43	Phi Kappa Sigma
Simpson, Robert Lee	Fresno	Zoöl.90-51+65	27 Ene. Av., P-*2275*
[6]Simpson, Roger Graham	Berkeley	Bact. 25-147+10	Sigma Chi-*628*
Sims, Richard Maury, Jr.	Berkeley	LD 96+111	Zeta Psi-*B*
[14]Sims, Robert Floyd	Long Beach	Econ.152+66	Delta Kappa Epsilon
[5]Singer, John Hutchins	Lincoln	Econ. 153+17	Sigma Nu-*1385*
Singer, Sidney Charles, Jr.	Glendale	LD 3-49+43	301 Encina-*2187*
[4]Sipson, Frances Brett	Lockport, N.Y.	LD ‡	257 Roble
[4]Sisemore, William A. A.B., Louisiana, 1925, A.M., 1928	Baton Rouge, La.	Educ. gr.	420 Florence, P-p
Sisson, Charles A. A.B., Kansas, 1923	Lawrence, Kans.	Engl. gr.	208 Oak, P-p
[4]Skeeters, Russell Neal B.S., Des Moines, 1923	Porterville	Phys. gr.	571 Addison, P-p
[4]Skelley, Lester Everett A.B., Chico State Teachers College, 1928	Chico	Educ. gr.	550 Lasuen-*628*
[1]Skelton, Harris Rolland A.B., Stanford, 1929	Red Bluff	Econ. 180+132	540 Encina-*905*
[4]Skewis, Mary Alberta B.M., Washington, 1924	Tacoma, Wash.	Span. gr.	220 Roble-*845*
Skillern, John Philip	Boise, Idaho	LD 82+8	Phi Gamma Delta

Skilling, Leonard Eugene A.B., Stanford, 1926	San Francisco	Med. gr.	2180 Washington, SF-sf
[5]Skinner, Clifton Ross A.B., Stanford, 1929	Portland, Ore.	E.E. gr.	119 Toyon-*1331*
Skinner, John William	Portland, Ore.	LD 46+79	229 Encina-*1932*
Skipwith, Marvin	Los Angeles	LD 83+2	1147 Ramona, P-*1847*
[12]Skow, Royce Kenneth	San Jose	S.Biol. 137+79	440 Foothill Rd.
[1]Slaff, George A.B., Harvard, 1926; J.D., Stanford, 1929	Passaic, N.J.	Law gr.	303 Union-*1184*
[1]Slaff, Samuel A.B., Stanford, 1925, J.D., 1929	Passaic, N.J.	Law gr.	303 Union-*1184*
[4]Slater, Kenneth Norton A.B., Stanford, 1926	Mountain View	Educ. gr.	316 Loreto, MV-mv
Slater, Verden Giddings A.B., Stanford, 1927	Culver City	Med. gr.	2480 Washington, SF-sf
[4]Slavens, Jean A.B., Arizona, 1921; A.M., Stanford, 1927	Phoenix, Ariz.	Educ. gr.	119 Roble-*955*
Slawson, Harrison S.	Sacramento	Econ.18·85+84	541 Salvatierra-*628*
[3]Sleezer, Margaret Myrtle Ph.B., Chicago, 1911	Chicago, Ill.	Educ. gr.	574 Constanso
[4]Sloan, Mildred Emma	Paso Robles	Educ. ‡	345 E. San Antonio, SJ-sj
[4]Sloane, John Lloyd	Sanger	Educ. ‡ 16–10	Mayfield-m
Slocum, Donald Barclay	Portland, Ore.	LD 46+40	310 Encina-*2276*
Slocumb, Rigdon Hall	San Francisco	LD 85+1	227 Waverley, P-p
Sloss, Frank Hecht A.B., Stanford, 1929	San Francisco	Hist. 181+327	205 Branner-*2764*
Sloss, Henry Esberg	San Francisco	LD 89+22	327 Emerson, P-*2614*
Sloss, Joseph, Jr.	San Francisco	LD 93+33	327 Emerson, P-*2614*
Sluiter, Engel A.B., Stanford, 1929	Harrison, S.D.	Educ. 90·90+112	533 Encina
[5]Small, Francis McCauley	Stanford Univ.	Soc.S.-Jn. 90+83	Theta Xi
Smalling, Charles O.	Templeton	Econ. 126–11	Phi Delta Theta
[4]Smart, Justine Elliott	Roseville	Ed.-G.A. ‡	Stanford Univ.
[1]Smedberg, George Chaffin	San Francisco	LD 57–21	239 Toyon-*1722*
Smith, Adele Katherine	Washington, D.C.	LD 76+79	Delta Gamma-*1366*
[234]Smith, Arthur D. A.B., Fresno State Teachers College, 1929	Lindsay	Educ. gr.	419 Encina
[4]Smith, Bromley Keables	San Diego	LD ‡	324 Union-*1300*
[4]Smith, Calvin J.	Los Angeles	Soc.S. ‡	224 Toyon-*1239*
Smith, Charles Blakslee	Los Angeles	Pol.S. 144+63	247 Branner-*1645*
Smith, Charles Edward A.B., Stanford, 1927	Sacramento	Med. gr.	2180 Washington, SF-sf
Smith, Charles Kirtland	Palo Alto	Econ. 90·32–29	1335 Cowper, P-p
Smith, Clarence Richard	Comptche	LD 80–3	1455 Cambridge, M-*1286*
[5]Smith, Colin Hubbard	Los Angeles	Geol. 49·131–10	Alpha Delta Phi-*J*
[5]Smith, Donald Franklin	Los Angeles	Pol.S. 138+82	AlphaTauOm.-*1384*
Smith, Edward Anderson A.B., Stanford, 1928	Palo Alto	Educ. gr.	545 Bryant, P-*2132*
Smith, Edward Lee	Kemmerer, Wyo.	Econ. 93·38+9	414 Emerson, P-p
Smith, Edward Wright A.B., Stanford, 1929	Santa Barbara	Econ.90·83+73	593 Salvatierra-*127*
[12]Smith, Edwin Harvey A.B., Stanford, 1929	San Francisco	Math. 185+224	Theta Xi
[5]Smith, Edwin Russell	Los Angeles	LD 41–4	347 Encina-*1412*
Smith, Eleanor Vedder	Schenectady, N.Y.	LD 46+19	304 Roble-*2005*
[4]Smith, Elliott Bryant	Sausalito	Econ. ‡	182 Roble

Smith, Frank Hilton — San Francisco — Phyl.-Med.105·100+47 — 327Wv,P-p
A.B., Stanford, 1929
Smith, Freid Lynn — Marysville — Bact. 187+67 — 245 Toyon-*1855*
A.B., Stanford, 1929
Smith, George E. P., Jr. — Stanford Univ. — Chem. gr. — 2 Union-*521*
B.S., Arizona, 1926
[5]Smith, George Raymond — Princeville, Ill. — LD 98+44 — 140 Toyon-*1228*
Smith, George Shaw — St. Louis, Mo. — Econ. 137+42 — Sigma Chi-*628*
Smith, Gilbert Wheeler — Hollywood — Chem. 43·94+4 — 189 Cowper, P-p
Smith, Hamilton A. — Palo Alto — Geol. 90·34–1 — 219 Seale, P-p
[4]Smith, Harold Alfred — Long Beach — LD — 226 Union-*615*
[4]Smith, Harold Diemer — Pomona — Chem. gr. — 239 Toyon-*1159*
A.B., Pomona, 1929
Smith, Harry Bell — Los Gatos — LD 49·43–2 — 446 Encina
Smith, Hebard Payson — Berkeley — S.Engr. 5·148+67 — 239 Toyon-*605*
Smith, Helen Agatha — Portland, Ore. — Hist. 140+180 — Chi Omega
[4]Smith, Helen May — Harrisburg, Pa. — Pol.S. ‡ — 538 Alvarado
Smith, Jack Carpenter — Tulsa, Okla. — Chem. 144+98 — 116 Branner-*2122*
[5]Smith, Jerome Frost — San Diego — Pre-Med.15·160+14 — Pacific Gr.-pg
[4]Smith, Jessie Dunlap — Twin Falls, Ida. — Engl. gr. — 415 Lytton, P-p
A.B., Whitman, 1916
[1]Smith, Joseph Odell — Los Angeles — Law 5·175+60 — Delta Chi-*1304*
A.B., Stanford, 1929
Smith, Kernick — San Francisco — LD 40+12 — 203 Encina-*2604*
Smith, Lewis Elden — Whittier — S.Bus. gr. — 223 Union-*1233*
A.B., Whittier, 1928
[6]Smith, Lewis Nelson — Palo Alto — Hist. 124+26 — Beta Theta Pi-*1335*
Smith, Lloyd Melvin — Hollywood — Soc.S. 182+160 — 216 Toyon-*1468*
A.B., Stanford, 1929
[4]Smith, Lowell James — Dallas, Tex. — Engl. gr. — Buena Vista Camp,M-m
B.S., Whitman, 1926
[4]Smith, Magdalen M. — Livingston, Mont. — Span. gr. — 565 Salvatierra
A.B., Montana, 1926
[4]Smith, Margaret A. — Palo Alto — Engl.-P.Sp. ‡ — 525 Lytton, P-p
[4]Smith, Marian G. — Walla Walla, Wash. — Engl. gr. — Buena Vista Camp, M-m
A.B., Whitman, 1927
Smith, Melvin E. — Salt Lake City, Utah — LD 107+134 — 140 Branner
Smith, Meredith Kopp — Tacoma, Wash. — Pol.S. 93·47+13 — 431 Encina-*1552*
[4]Smith, Merrill Jefferson — Roswell, N.M. — Educ. gr. — Menlo School, MP-*1142*
B.S., Massachusetts Institute of Technology, 1914
Smith, Percy A. — Stockton — Law gr. — 215 Union-*1162*
A.B., College of the Pacific, 1927
Smith, Philip Patterson — Bartlesville, Okla. — LD sp. 68+8 — 212 Sequoia-*2346*
Smith, Philip Templeton — Santa Monica — Hist. 125+14 — Phi Kappa Sigma
[12][4]Smith, Phillip Bannister — Oakland — Econ. 116+64 — 564 University, P-p
Smith, Powell Eugene — Santa Barbara — Econ. 90·47+48 — 106 Sequoia-*1018*
[23]Smith, Robert Elliott — Azusa — Chem. 90·36+42 — 434 Encina-*541*
Smith, Robert Lee — Pomona — LD 46+61 — 221 Encina-*1099*
Smith, Rogers Phillip — Seattle, Wash. — LD 90+12 — Delta Kappa Epsilon
[12]Smith, Roy Murray — Big Pine — Soc.S.-Jn.12·169+90 — 515 Univ.,P-p
A.B., Stanford, 1929
[4]Smith, Samuel William — Palo Alto — LD — 1401 Bryant, P-p
Smith, Sanderson — Stanford Univ. — LD 71–9 — 18 Branner-*678*
Smith, Seymour Purdon — Pacific Grove — Zoöl. gr. — 243 Toyon-*2471*
A.B., Stanford, 1927
[5]Smith, Stacy H., Jr. — Palo Alto — Econ. gr. — 351 Bryant Ct., P-p
A.B., Stanford, 1927

[1]Smith, Sylvanus F.	Los Angeles	LD 45·16–3	408 Encina-*1992*
[4]Smith, Waldo Emerson	Fullerton	LD ‡	116 Encina-*1326*
Smith, Ward C.	St. Louis, Mo.	Geol. 127+136	314 Toyon-*961*
[4]Smith, Weir G.	Stratford	Educ. gr.	750 Bryant, P-p
A.B., Fresno State Teachers College, 1928			
[4]Smith, William Bernard	Twin Falls, Ida.	Educ. gr.	415 Lytton, P-p
A.B., State College of Washington, 1915			
[5]Smithee, Clayton Baker	Menlo Park	LD 87+27	MP-Box 37G, mp
[4]Snedden, Loring Bertram	Maricopa	Geol. ‡	Ventura-v
Snedden, Pauline K.	Yonkers, N.Y.	Psych. 133+68	Kappa Alpha Theta
Snider, Earle Kirn	Fresno	Econ. 88·48+6	Theta Chi-*1383*
Snodgrass, R. Gordon	Los Angeles	Econ. 141+121	425 Encina-*701*
Snoke, Albert Waldo	Palo Alto	Med. gr.	1820 Cowper, P-p
B.S., Washington, 1928			
[4]Snow, Byron Reginald	Palo Alto	Educ. gr.	1159 Fulton, P-p
A.B., Stanford, 1926			
Snow, Edwin Arthur	Boise, Idaho	Econ. 135+88	111 Branner-*1254*
Snyder, Edward Eugene	Burlingame	Chem.90·52+8	1422 Capuchino,B-b
Snyder, Emma Jane	Hollywood	LD 45+35	*372* Roble-*2464*
[4]Snyder, Evelyn Hamilton	Stanford Univ.	S.Biol. 96+31	542 Alvarado
Snyder, Jack Crayton	Pasadena	LD 92+163	Alpha Delta Phi-*J*
Snyder, Jeannette Llewellyn	San Jose	Psych. 133+142	219 Roble-*1976*
[5]Snyder, John Calvert	Jackson	Law gr.	774 Santa Ynez
A.B., Stanford, 1929			
Snyder, Loilor Jordan	San Diego	Chem. gr.	334 Union-*2278*
A.B., Stanford, 1927, A.M., 1929			
Snyder, Rixford Kinney	San Jose	Ec.134+196	1045Bird,SJ-Bx478,sj
[1]Snyder, Robert Jerome	Palo Alto	Econ. 90·109+11	635 Lowell, P-p
A.B., Stanford, 1929			
§[1]Snyder, Walter Willoughby	Palo Alto	Engl. gr.	707 Bryant, P-p
A.B., Arizona, 1921; A.M., California, 1924			
Snyder, W. Gilman	Jackson	E.E. gr.	774 Santa Ynez-*601*
A.B., Stanford, 1928, Engineer, 1929			
Soares, Edward J.	San Francisco	S.Engr. 5·139+20	204 Sequoia-*967*
Sobey, Katharine Douglas	Paso Robles	Econ. 119–4	201 Roble-*2827*
Soderberg, Kermit Joseph	Los Angeles	LD 41–4	136 Encina-*137*
Soderstrom, Edwin Morris	Medford, Ore.	Med. gr.	2323 Sacramento, SF-sf
A.B., Chicago, 1927			
Solomon, Gus Jerome	Portland, Ore.	Law gr.	203 Union-*636*
Ph.B., Chicago, 1926; LL.B., Stanford, 1929			
Solomon, John William	Los Angeles	Pol.S. 145+102	Sig. Al. Eps.-*1305*
[4]Sone, Law	Panhandle, Texas	Educ. gr.	710 Yale, M-m
A.B., West Texas State Teachers College, 1925			
Sorensen, L. Garfield	Hilo, Hawaii	S.Engr. 139+38	249 Toyon-*2188*
[4]deSoto, Alexander Phillips	Seattle,Wash.	Educ. gr.	560 Salvatierra-*1648*
A.B., Washington, 1928			
[4]Southern, Clarence Edward	Mesa, Ariz.	Educ. gr.	Beta Theta Pi-*1335*
A.B., Evansville, 1927			
Sox, Harold Carleton	Albany, Ore.	Med. gr.	Menlo Park-*2037*
A.B., Oregon, 1927			
Spaght, Monroe Edward	Eureka	Chem. 90·95+106	408 Sequoia-*1935*
A.B., Stanford, 1929			
[4]Spain, Harrison M., Jr.	Portland, Ore.	LD	313 Union-*881*
Spalding, Howard Francis	Medford, Ore.	LD 91+163	102 Sequoia-*2583*
Spalding, Rufus Paine, Jr.	S. Pasadena	LD 42–6	*224* Encina-*1786*

§ Deceased, December 28, 1928.

[12]Sparks, Benton Knight	Monterey	Econ. 76–14	Phi Kappa Psi
Sparling, William Alexander A.B., Stanford, 1929	Hollister	Econ. 180+91	Lagunita Knoll-*J*
Spaulding, Catherine Mary	Los Angeles	LD 46+36	114 Roble-*2185*
Spaulding, Jean Benedict A.B., Stanford, 1928	San Bernardino	Chem. gr.	218 Roble-*2363*
Spaulding, Neal Herrick	San Bernardino	LD 73+19	Alpha Tau Omega-*2363*
[4]Spearman, Ethel A.B., Drury, 1921	Sanger	Math. gr.	718 Bryant, P-p
Specker, Lewis A.B., Pennsylvania, 1926	Philadelphia, Pa.	Med. gr.	1238 Cowper, P-p
Speegle, Paul Lanz	Berkeley	Pol.S. 144+107	Chi Psi-*1648*
[6]Speers, Robert Dean	Palo Alto	Soc.S.-Jn. 143+86	Phi Kappa Psi
Spencer, Allan Thomas	Woodland	LD 52+16	404 Encina-*134*
[4]Spencer, John Alfred	Portland, Ore.	LD	328 Union
[4]Spencer, Verlin A.B., Colorado State Teachers College, 1925	Calistoga	Educ. gr.	145 Toyon-*1220*
[1]Sperry, Willard Coombs A.B., Stanford, 1929	Los Angeles	Econ. 87·94+5	Kappa Sigma-*1326*
[4]Spillers, William H. A.B., New Mexico, 1926	Albuquerque, N.M.	Educ. gr.	138 Encina-*853*
[5]Spinks, Charles Nelson A.B., Stanford, 1929	Los Altos	Hist. gr.	Los Altos-Box 237, la
[124]Sprague, Charles Myron A.B., Bowdoin, 1922	Stanford Univ.	S.Biol. gr.	512 Governor's Ave.
Springer, James Milford	Los Angeles	Pol.S. 137+52	Sigma Chi-*628*
Springer, John Young A.B., Stanford, 1927, M.B.A., 1929	Palo Alto	S.Bus. gr.	305 Lytton, P-p
Stadler, Louis Stewart	Helena, Mont.	LD 99+70	111 Branner-*1855*
Stafford, Claude C. A.B., Stanford, 1924	San Francisco	Med. gr.	2470 Washington, SF-sf
[12]Stahle, Therice Henry B.S., Utah, 1927	Bountiful, Utah	Law gr.	213 Emerson, P-p
Staley, L. Martin A.B., Stanford, 1929	San Diego	Econ. 109·71+1	Alpha Tau Omega
Stanford, Helen Winslow A.B., Stanford, 1928	Piedmont	Econ. gr.	Kappa Kappa Gamma
[4]Stanford, Lucina A.B., Fresno State Teachers College, 1928	Pacific Grove	S.Biol. gr.	104 Fountain, PG-pg
Stanley, Max Richard	Santa Monica	Econ. 21·90–15	207 Branner-*576*
[4]Stansell, Sidney S. S. A.B., San Jose State Teachers College, 1928	Sunnyvale	Educ. gr.	459 E. Washington, S-s
Starbird, George Albert	King City	LD 97+32	Chi Psi-*1648*
[4]Starr, Paul Holroyd	Cody, Wyo.	LD	139 Toyon
Starr, Theodore S.	Modesto	Hist. 90·46+35	PhiSigmaKap.-*538*
[4]Stason, Margaret A.B., Wellesley, 1919; M.S., Iowa Agricultural, 1920	Pasadena	Bot. gr.	Pacific Grove-pg
Stearns, Muriel Imogene	Riverside	Hist. 46·94+76	341 Roble-*592*
Steele, Arthur Bruce A.B., Southern California, 1927	San Francisco	Med. gr.	2480 Washington, SF-sf
[1]Steele, Orvie Allen	Portland, Ore.	LD 7–10	Encina-*1831*
[1]Steele, Shorb	San Francisco	Hist. 90·38–15	302 Branner-*1243*
Steele, Warren Nelson, Jr.	Modesto	LD 47+25	107 Encina-*671*
[12]Stein, B. Alden	Alhambra	LD 56+21	416 Encina-*734*
[23]Stein, Charles	Santa Rosa	LD 58+11	324 Sequoia-*642*
[4]von Stein, Mary G. A.B., Stanford, 1919	Ontario	Math. gr.	Cardinal Hotel, P-p

Stein, William C. Los Angeles Law gr. 741 Addison, P-*2198*
A.B., Stanford, 1928
Steinbeck, Stanford E. Hollister Econ. 7·140+86 244 Toyon-*2141*
[4]Steinberg, William San Francisco Law gr. 439 Bowdoin, SF-sf
A.B., California, 1927
[23]Steiner, Arnold Byron San Francisco LD 28+54 450 Encina-*602*
[4]Steiner, Ernest Honolulu, T.H. LD ‡ 521 Lasuen
Steinhart, Carl Stockton LD 45+16 335 Encina-*1027*
[4]Steinhart, Muriel Constance Santa Clara Educ. gr. 1585 Fremont, SC-sc
A.B., San Jose, 1928
[5]Steininger, Alma Helen Palo Alto Ed.-G.A. gr. 419 Webster, P-p
A.B., Stanford, 1917
[4]Stenz, Charles Joseph Paterson, N.J. Phys. ‡ 305 Lytton, P-p
Stephens, Bruce Miller Alameda Med. gr. 1250 Bay, Alameda-a
A.B., Stanford, 1927
Stephens, Jefferson Chandler Los Angeles LD 57–4 446 Encina-*1801*
Stephens, John Storer, Jr. Palo Alto LD 93+59 535 Lowell, P-p
[12]Stephens, Moye Wicks, Jr. Hollywood Law gr. Alpha Delta Phi-*J*
A.B., Stanford, 1929
[12]Stephens, Robert Lee Portland, Ore. M.E. 180+84 233 Union-*2401*
A.B., Stanford, 1929
Stephens, Trow Hendrick Hollywood LD 94+94 Alpha Delta Phi-*J*
[2]Sterling, Helen Feldman Redwood City Educ. gr. 1035 Emerson, P-p
A.B., Hunter College of City of New York, 1920; A.M., Stanford, 1928
[23]Stern, Charles, Jr. Rochester, N.Y. Hist. 90·57+8 *237* Branner-*882*
Sterry, Lewis Trask Los Angeles LD 40–7 *224* Encina-*1712*
Stevenson, Archie M. Palo Alto Law gr. 1327 Byron, P-p
A.B., Stanford, 1926, J.D., 1929
Stevenson, Elmo Nall San Jose Educ. gr. 153 N. 14th, SJ-sj
A.B., San Jose State Teachers College, 1927; A.M., Stanford, 1929
[234]Stevenson, Hollice E. Flagstaff, Ariz. Educ. gr. 1492 W. Villa, MV-mv
Ed.B., Northern Arizona State Teachers College, 1928
Stevenson, Richard Gray Piedmont LD 92+35 Delta Kappa Epsilon
[5]Stevick, Donald Justin Atherton LD 69–2 Kappa Sigma-*1326*
Stewart, Edgar B.,Jr. Morgantown,W.Va. Hist.90·50+63 Del.Tau Delta-*1363*
[4]Stewart, Frank Torrance, Colo. LD *209* Toyon-*1131*
[4]Stewart, Irena Lucile Lomita Park Educ. gr. Belmae Park-bp
A.B., San Francisco State Teachers College, 1929
Stewart, James Z., III Logan, Utah S.Bus. gr. 306 Union
B.S., Utah Agricultural, 1928
[5]Stewart, John Kenneth Los Angeles Econ. 150+97 Beta Theta Pi-*1335*
[4]Stewart, May Libbie E. Jordan, Mich. Educ. gr. 1019 Bryant, P-p
Ph.B., Chicago, 1922, A.M., 1923
Stewart, Richard Reginald Inglewood Pol.S. 126–1 Alpha Delta Phi-*J*
[4]Stickney, M. Norman Simsbury, Conn. Educ. gr. Stanford Univ.
A.B., Bates, 1924
Stine, John MacLeod San Francisco Econ. 181+58 Alpha Delta Phi-*J*
A.B., Stanford, 1929
Stine, Oliver Charles San Francisco LD 44–24 *232* Encina-*1843*
Stineback, George Ceburn Oak Park, Ill. Geol. 130·43+34 305 Lytton, P-p
Stock, Thomas Leland Sacramento Pol.S. gr. *327* Union-*1271*
A.B., Stanford, 1927
Stockbridge, Elmer L. Los Angeles Econ. 49·90+15 113 Toyon-*605*
[4]Stocklmeier, Adele Irmler Cupertino Ed.-G.A. gr. Cupertino-c
A.B., Stanford, 1918
Stocktill, Ruth Henrietta Oildale Fr. 90·93+109 348 Roble
A.B., Stanford, 1929

Stockton, Philip Brent	La Jolla	LD 82+30	208 Branner-*2111*
Stoddard, Kenneth Berkeley	Los Angeles	Phys. gr.	315 Union
A.B., California at Los Angeles, 1928			
[1]Stoker, Ray Cooke	Denton, Tex.	Engl. gr.	Madroño-*2551*
A.B., Texas, 1922, A.M., 1923; Ph.D., Stanford, 1929			
[1]Stoker, Spencer Longshore	Denton, Tex.	Educ. gr.	Madroño-*2551*
A.B., Texas, 1922, A.M., 1923			
[12]Stoll, Warner R.	Los Angeles	LD 21–20	30 Encina
[34]Stone, Elsie Bailey	Palo Alto	Engl. gr.	1010 Bryant, P-p
B.S., Simmons, 1916			
Stone, Frederick Eaton	Porterville	Pol.S. 140+87	241 Toyon
Stone, John William	Los Angeles	LD 72–10	140 Branner-*1110*
Stone, Nevdone	Pasadena	Econ. 5·175+47	117 Toyon-*812*
A.B., Stanford, 1929			
[2]Storey, Herbert C.	Suisun	LD 45+2	349 Hamilton, P-p
[5]Storey, Parnie Hamilton	Stanford Univ.	S.Biol. gr.	739 Santa Ynez-*1606*
A.B., Stanford, 1928			
Storke, Jean Isabel	Santa Barbara	Phys. gr.	Madroño-*1427*
A.B., Vassar, 1927			
[4]Storm, Eugene Max	San Diego	Educ. gr.	220 Toyon
A.B., Stanford, 1928			
[4]Storms, Allan Wenzel	Los Angeles	LD ‡	Chi Psi
Story, Donald Lee	Anderson	LD 85+16	240 Branner-*2571*
Story, George Watkins	Portland, Ore.	Soc.S.-Jn. 139+78	Delta Kap. Eps.
[4]Strand, Fridtjof A.	Centerville, S.D.	Educ. gr.	347 Alma, P-p
A.B., St. Olaf, 1923			
Strauss, Richard Kenneth	Chicago, Ill.	Econ. 5·138+11	Sig.Al. Eps.-*1305*
Strickler, Harry Early	Stanford Univ.	S.Bus. gr.	246 Toyon-*2181*
A.B., Stanford, 1928			
Strong, Charles H.	Tacoma, Wash.	LD 47+29	345 Encina
Strong, F. Calvert	Long Beach	Econ. 180+1	Phi Delta Theta
A.B., Stanford, 1929			
Strong, Kenneth Clark	San Francisco	Med. gr.	275 Colon, SF-sf
A.B., Stanford, 1927			
Strong, Marian	Los Angeles	Soc.S. 94+79	Pi Beta Phi-*1918*
Strout, Miriam North	La Jolla	LD 45+28	112 Roble-*2433*
Strout, Ruth Louise	Alameda	LD 9·89+2	Kappa Alpha Theta
de Strycker, Robert E.	Antwerp, Belgium	Min. gr.	313 Union-*817*
Engineer, Louvain, 1926; Engineer, Stanford, 1929			
Stuart, Arthur Waters	Stanford Univ.	Hist. 16·119+49	654 Cabrillo-*1063*
[13]Stuart, Elizabeth	Alhambra	LD 72+70	Delta Gamma-*1366*
[4]Stuart, Meriwether	Liberty, Mo.	Cl.Lit. gr.	209 Toyon
A.B., William Jewell, 1925; A.M., Indiana, 1927			
Stubblefield, Howard Everett	Ontario	S.Engr.45·123+95	634 Homer, P-p
Studebaker, Leland F.	Fort Dodge, Ia.	Pre-Med.90·47+31	345Hamilton,P
Stump, George Taft	Visalia	LD 46+22	348 Encina-*857*
[12]Sturm, Paul Leo	Hoquiam, Wash.	Geol. 95+36	110 Toyon-*144*
[234]Sturmer, Anna Marie	Beatrice, Neb.	Engl. gr.	Madroño-*52*
A.B., Nebraska, 1917, A.M., 1920			
Suffel, George Gordon	Palo Alto	Geol. gr.	969 Channing, P-p
B.S., Queen's, 1925; Ph.D., Stanford, 1929			
Suffel, George Shumway	Pasadena	LD 11·90+79	307 Sequoia-*697*
Sullivan, Crawford J.	Hollywood	LD 45+46	13 Encina-*2577*
[12]Sullivan, John Graham	Merced	Econ. 127+17	528 Encina
Sullivan, Willis Eugene, Jr.	Boise, Idaho	LD 46+36	117 Encina-*687*
Sulzbacher, Carl Minor	Los Angeles	LD 78+26	Chi Psi-*1648*
Suma, Masao Matsumoto	Hiroshima, Japan	Pol.S. gr.	Japanese Club-*1152*
A.B., Stanford, 1927, A.M., 1928			

Sumner, Roger Wells — Pasadena — LD 30+10 — 308 Encina-*2342*
Sumner, William A. — San Jose — Med. gr. 2180 Washington, SF-sf
A.B., Stanford, 1926
[5]Sun, Jui Lin — Kung-Ming, China — Pol.S. gr. — 1535 College, M-*1293*
A.B., Shanghai Baptist, 1927; A.M., Stanford, 1929
Sutro, Oscar — Piedmont — LD 45+13 — 251 Encina-*1636*
Sutton, Harriet Edith — South Pasadena — Ed.-G.A. 135+40 — Pi Beta Phi-*1918*
Sutton, Herbert Bryan — Phoenix, Ariz. — LD 91+104 — 110 Branner-*1494*
[4]Swain, Genevieve Margaret — Santa Clara — Educ. gr. — 252 Roble
A.B., San Jose State Teachers College, 1928
Swain, Stanley Olivier — Sebastopol — Ed.-G.A. 83·89+21 — 308 Union-*1234*
[1]Swales, Robert Davis, Jr. — MendocinoCity — LD — 334 Encina-*1135*
[4]Swan, Fred Haviside — San Mateo — Educ. 165+17 — 120 Tilton, SM-sm
Swan, Harmon James — Los Angeles — Geol. gr. — Union-*2033*
A.B., California at Los Angeles, 1925
Sweeney, Dean — Los Angeles — Econ. 92·88+16 — Phi Kappa Sigma
A.B., Stanford, 1929
Sweeney, Robert Sutton — Los Angeles — Econ.-Ac. 38·145+104 — Phi Kp. Sg.
A.B., Stanford, 1929
[4]Sweet, Bernardine B. — Ritzville, Wash. — Educ. gr. — 201 Homer, P-p
B.S., Oregon, 1926
Sweet, Dorothy Carol — Minneapolis, Minn. — LD 45+49 — 147 Roble-*2436*
[4]Sweet, Edmund H. — Ritzville, Wash. — Educ. gr. — 201 Homer, P-p
A.B., South Dakota, 1907, LL.B., 1910
[4]Sweet, Margaret Amelia — Lewiston, Ida. — Educ. gr. — Madroño-*862*
B.S., Idaho, 1927
Sweigert, Charles F. — San Francisco — Med. gr. — 224 Cole, SF-sf
A.B., Stanford, 1927
[23]Swen, Wen Yuh — Shansi, China — Chem. gr. — 835 Waverley, P-*1243*
B.S., Nanking, 1924
[4]Swett, Margaret — Berkeley — Educ. gr. — 247 Everett, P-p
A.B., California, 1923
Swett, Theodore Moses — Portland, Ore. — Law gr. — 203 Union-*2425*
A.B., Reed, 1926
Swickard, Andrew Emerson — San Jose — M.E. gr. — 326 Union
A.B., Stanford, 1928
[3]Switzer, A. Irwin, Jr. — Spokane, Wash. — Educ. gr. — 320 Union-*973*
A.B., Gonzaga, 1929
Switzer, Charles Herbert — Toronto, Can. — Hist. 99·81+6 — 1020 Bryant, P-*1432*
A.B., Stanford, 1929
Syer, Robert D'Oyly — San Jose — Hist. 181+152 — Phi Kappa Psi
A.B., Stanford, 1929
[1]Sylvester, Peter Edward — Gilroy — LD 44–14 — 342 Homer, P-*628*
Tachibana, Worth J. — Milwaukie, Ore. — LD 43–4 — Japanese Club-*598*
[14]Taft, Alan C. — Palo Alto — Zoöl. gr. — 168 Waverley, P-p
A.B., Stanford, 1927, A.M., 1928
Taft, Louise Swail — Pasadena — LD 48+88 — 160 Roble-*2423*
[12]Taft, Orray, Jr. — Santa Barbara — Pol.S. 117+0 — 105 Branner-*2672*
[1]Tai, Li Sun — Kiangsu, China — S.Biol. gr. — Chinese Club-*2471*
A.B., National Southeastern, 1925
[1]Tait, Dudley — Oakland — LD sp. — 475 Brannan, SF-sf
Tait, Roy Magnus — Phoenix, Ariz. — Econ. 97·83+60 — Phi Gamma Delta
A.B., Stanford, 1929
Takesaka, James Yoshito — Irvington — LD 48·47+69 — Japanese Club-*598*
[1]Talavera, Hilarion M. — La Paz, Iloilo, P.I. — Zoöl. 90·36+35 — 509 Encina
[5]Talbert, Wilford Ebenezer — Berkeley — Educ. gr. MP-RFD, Bx 357R, mp
A.B., Stanford, 1913, A.M., 1914
[5]Tamada, Henry T. — San Jose — Pre-Med.90·62+80 — Jap'seClub-*598*

Tampcke, E. John	San Francisco	LD 74–10	Delta Upsilon
Tandy, Ray Elmer	Alta Loma	LD 94+41	21 Toyon-*1855*
[4]Tannenbaum, Jerry	Santa Ana	LD	132 Toyon
[18]Tanzer, Ward H.	Fresno	LD 76–1	Phi Delta Theta
Tanzey, Virginia Bruce	Kansas City, Mo.	LD 41+2	108 Roble-*1705*
[1]Taormina, Anthony	Sunnyvale	Fr. 83–37	Sunnyvale-Box 302, s
Tarr, John Stockman	Tacoma, Wash.	LD 10·46+41	401 Encina-*1024*
[234]Tashjian, Harry Martin	Cutler	Econ. 59·78–10	Stanford P'k-*1872*
[4]Tasker, Katherine E.	Hermosa Beach	LD ‡	Roble
Tawney, Charles Albert, Jr.	Palo Alto	Econ. 90·48+74	435 Encina-*841*
[12]Taylor, Albert LeR.	Salt Lake City,Utah	E.E. gr.	816 Waverley, P-p
B.S., Utah, 1927; M.S., Michigan, 1918			
Taylor, Francis Howard	Troy, Pa.	LD 49+18	565 Salvatierra-*927*
Taylor, Harvey Grant	Los Gatos	Educ. gr.	319 Sequoia
A.B., San Jose State Teachers College, 1928;		A.M., Stanford, 1929	
[3]Taylor, Howard Story	Mayfield	Min. gr.	1211 College, M-*1485*
B.S., Michigan, 1928			
Taylor, John Owen	Kent, Wash.	LD 45+46	244 Encina-*1823*
[34]Taylor, Louise Huston	Toledo, O.	Engl. gr.	Madroño-*2053*
A.B., Ohio State, 1923			
[5]Taylor, Mark Lincoln	Long Beach	Econ. 130+23	Sigma Chi-*628*
Taylor, Marshall Kellogg	Burley, Idaho	Pol.S. 138+119	110 Toyon-*1218*
[3]Taylor, Olga Burdett	Oakland	Zoöl. ‡	227 Roble
Taylor, Perry Norman	Tulare	Geol. 48·89+27	121 Toyon-*2668*
Taylor, Robson Ewart	Phoenix, Ariz.	LD 49+17	302 Encina-*643*
[12]Taylor, Victor Rogers	Provo, Utah	Law gr.	758 Waverley, P
A.B., Brigham Young, 1928			
Taylor, Wilfred Barton	Santa Ana	S.Bus. gr.	1506 College, M-*814*
A.B., Pomona, 1928			
Teach, Kathryn	San Luis Obispo	LD 88+97	242 Roble-*114*
Teague, Charles McKevett	Santa Paula	LD 90+35	Beta Theta Pi-*1335*
[1]Tebbe, Stanley	Weed	LD 8–12	428 Encina-*1678*
[1]Templeman, Harold M.	Lawrence, Mass.	LD 36–31	Delta Upsilon
Templeton, Robert Palmer	Portland, Ore.	LD 94+108	Alpha Sigma Phi
[4]Tenney, Cecilia Edith	Portland, Ore.	Fr. gr.	Madroño-*502*
A.B., Reed, 1919			
[124]Tenny, Stanley Warn	San Mateo	LD 45·46+48	130 Encina-*621*
[4]Terman, Sibyl Walcutt	Stanford Univ.	Psych. gr.	659 Salvatierra
A.B., Arizona, 1925; A.M., Stanford, 1928			
[4]Terrell, Horace Clifford	Newberg, Ore.	Engl. gr.	557 Lasuen-*1335*
A.B., Earlham, 1924			
Terrill, Kenneth Stuart	San Francisco	LD 32–3	140 Encina
Terrill, Robert Philip	Santa Monica	LD 93+77	Chi Psi-*1648*
[4]Terry, Ulmer Neal	Twin Falls, Ida.	Educ. gr.	205 Emerson, P
A.B., Spokane, 1920; M.S., Idaho, 1928			
Terwilliger, Hal Rowe	Palo Alto	S.Engr. 145+196	575 Embrdo.,P-p
Tesche, Elmer Fred	San Jose	Chem. 165+108	208 Sequoia-*1280*
[5]Thatcher, John Pemberton	Reno, Nev.	Law gr.	Sigma Alpha Eps.-*1305*
A.B., Princeton, 1928			
[1]Thatcher, Ruth Clark	Reno, Nev.	LD 102+67	Kappa Alpha Theta
Thayer, George Edwin	San Mateo	S.Engr. 5·194+28	Theta Xi
A.B., Stanford, 1929			
Thayer, Mary Gertrude	Pacific Beach	LD 42–3	158 Roble-*2144*
Thayer, Wellman Perry	Los Angeles	C.E. 45·157+70	Phi Sg. Kap.-*538*
A.B., Stanford, 1929			
[5]Thebaut, William Maxwell, Jr.	Oakland	Anat. 135·46–1	532 Univ., P-p

[234]Theuerkauf, George Fred	Mt. View	S.Engr. 90·87–4	Mt. View-mv
Thiel, Leland Earl	Modesto	Econ. 90·95+8	133 Toyon-*2668*
A.B., Stanford, 1929			
Thigpen, William Rembert	San Fernando	LD 36–3	726 Encina-*2793*
[12]Thomas, Chesterlyn A.	Stanford Univ.	Soc.S. 180+155	Kappa Kap. Gam.
A.B., Stanford, 1929			
[1]Thomas, David Joseph	Crockett	LD 55–16	23 Toyon-*1855*
[4]Thomas, Faith Otha	San Jose	Educ. gr.	1151 Settle, SJ-sj
A.B., San Jose State Teachers College, 1926			
Thomas, John Oglesby	Stanford Univ.	S.Biol. gr.	Menlo Heights-*124*
A.B., Stanford, 1928			
[4]Thomas, Joseph Daniel	Los Angeles	Law gr.	307 Union-*1871*
A.B., Stanford, 1927			
Thomas, Lawrence Gregg	Fresno	Educ. 30·94+108	The.Del.Chi-*1828*
[5]Thomas, Margery E.	Stanford Univ.	LD 45+16	359 Roble
Thomas, Robert Lancefield	Portland, Ore.	Pre-Med.63·91+128	Phi Gam.Del.
Thomas, Robert Scofield	Oakland	LD 88+64	911 Bryant, P-p
[234]Thomas, S. Benson	Mill Valley	Chem. gr.	202 Sequoia
A.B., Stanford, 1927, Engineer, 1928			
Thomas, Starr	Riverside	LD 46+44	127 Encina-*908*
[4]Thomas, Zita Barnetta	Menlo Park	Educ. gr.	Menlo Park-Box 781,mp
A.B., San Jose State Teachers College, 1929			
[5]Thompson, Barbara Beach	Palo Alto	LD 46+39	380 Roble-*2617*
Thompson, Collis Porter	Akron, Ohio	Ec.-Acct. 135·46+7	Mayfield-*1255*
A.B., Stanford, 1929			
Thompson, Donald Ernest	Red Bluff	Pre-Md.100·44+27	552Alvdo-*1004*
[4]Thompson, Donald H.	Ellensburg, Wash.	Educ. gr.	650 Lasuen
A.B., Whitman, 1915			
Thompson, Dorothy Louise	Burbank	Hist. gr.	166 Roble-*2645*
A.B., California at Los Angeles, 1928			
Thompson, Florence M.	San Francisco	Span. gr.	Delta Delta Delta-*1325*
A.B., Stanford, 1928			
Thompson, George Powell	Palo Alto	Min. gr.	656 Kingsley, P-p
A.B., Stanford, 1929			
[13]Thompson, George Wylie	La Canada	Econ. 6·90+14	Beta Theta Pi-*1335*
Thompson, Gerald	Boonton, N.J.	LD 38–19	201 Encina
[12]Thompson, Helen Anne	Mill Valley	Engl. 110+106	Pi Beta Phi-*1918*
Thompson, Henry Webb	Glendale, Ariz.	Med. gr.	1900 Vallejo, SF-sf
A.B., Stanford, 1927			
Thompson, James Greer	Los Angeles	S.Engr. 108+28	Alpha Delta Phi-*J*
Thompson, Jesse Finley	Modesto	Econ. 90·91+16	522 Encina-*1473*
A.B., Stanford, 1929			
[12]Thompson, Joseph Alden	San Francisco	LD 71+31	705 University, P-*1496*
Thompson, Marjorie Louise	Berkeley	Hist. 45·138+98	375 Roble
A.B., Stanford, 1929			
Thompson, Richard Charles	La Canada	LD 45+6	123 Encina-*1901*
[5]Thompson, Thomas Francis	Eugene, Ore.	Geol. 16·140+57	Kappa. Sig.-*1326*
[4]Thompson, Walter Theodore	Modesto	LD ‡	110 Encina
Thompson, Warren O.	Boulder, Colo.	Geol. gr.	University Park-*1175*
A.B., Colorado, 1922			
[4]Thompson, William Alexander	San Jose	LD	122 Toyon
[5]Thomson, Robert Bradshaw	Los Angeles	Law gr.	515 Lytton, P-p
A.B., Stanford, 1929			
[234]Thomson, Ruth Haines	Palo Alto	Educ. gr.	615 University, P-p
A.B., Pacific, 1917; A.M., Washington, 1921			
[4]Thorburn, Earle David	Fresno	LD	11 Toyon
Thorner, Juliet Emma	Santa Barbara	LD 92+102	323 Roble-*544*

Thornton, A. Lee A.B., Stanford, 1929	Lakeview, Ore.	Chem. 183+66	247 Toyon-*2668*
Thornton, James William, Jr.	Livermore	Econ. 90-47+23	427 Embrcdo., P-p
[12]Thornton, Leigh Grey A.B., Stanford, 1929	Los Angeles	Econ. 180+54	Delta Kappa Eps.-*O*
Thornton, Norton Dolph	Portland, Ore.	Pol.S. 113+14	Boathouse
Thornton, Robert Yenney	Portland, Ore.	LD 53+60	333 Encina
[4]Thorp, Minta Estella A.B., Cotner, 1917; A.M., Nebraska, 1925	Coalinga	Engl. gr.	536 Cowper, P-p
Thorpe, Katherine A.B., Stanford, 1929	Covina	Math. 186+288	325 Roble-*2163*
Thorson, Charles Eugene	Los Angeles	LD 90+2	Zeta Psi-*B*
Threlfall, Donald Richard A.B., Stanford, 1926	Modesto	Med. gr.	2055 California, SF-sf
[4]Throndson, Albert Harold	San Francisco	LD	Boathouse
Throndson, Edward Julian	San Francisco	Pre-Med. 130+103	Boathouse
[5]Tibbitts, Fred Lyman A.B., Oklahoma, 1916, A.M., 1919	Tulsa, Okla.	Educ. gr.	682 Columbia, M-*2252*
Tickner, Boynton Bryan	San Francisco	LD 90+43	Beta Theta Pi-*1335*
Tillotson, John Sanford A.B., Stanford, 1929	Dinuba	Econ. 180+94	Sigma Chi-*628*
[4]Timpany, Charles Russell A.B., Stanford, 1924, A.M., 1925	Santa Clara	Chem. gr.	1775 Lexington, SC-sc
[234]Tiner, Hugh Marvin A.B., Abilene Christian College, 1929	La Vernia, Tex.	Educ. gr.	263 Lytton, P-p
Ting, Peter Clare	Porterville	LD 81+26	Pacific Grove-pg
[4]Tinsley, Gladney Jack B.S., Louisiana, 1925, M.S., 1927	Alexandria, La.	Educ. gr.	541 Salvatierra
[4]Tinsley, Maud Hood	Alexandria, La.	Engl. ‡	541 Salvatierra
Tinsley, Ruth Elizabeth A.B., Stanford, 1929	Kansas City, Mo.	Psych. gr.	Kappa Alpha Theta
[4]Tinsley, William W. A.M., Clark, 1925	Flagstaff, Ariz.	Hist. gr.	247 Toyon-*646*
Tippett, George W. A.B., Stanford, 1929	San Francisco	Med. gr.	2201 California, SF-sf
[2]Titus, Donald	Staten Island, N.Y.	LD 14–1	334 Encina-*1581*
Titus, G. Woodruff	Pasadena	LD 37–14	349 Encina-*2312*
[4]Titus, Robert C. A.B., Stanford, 1925	Berkeley	Educ. gr.	257 Toyon
Toalson, Norma Anne A.B., Stanford, 1929	Mexico, Mo.	Educ. gr.	Delta Delta Delta-*1325*
[1]Toberman, Homer M.	Hollywood	Econ. 148–6	Kappa Alpha
Todd, Samuel Spaulding A.B., Stanford, 1927, Engineer, 1929	Arcata	Chem. gr.	408 Sequoia-*2635*
[1]Todd, Walter Ernest A.B., Wesleyan, 1921	Menlo Park	Fr. gr.	Menlo Park-mp
Toepke, William Point	San Mateo	LD 44–17	323 Encina-*71*
[5]Toll, Carroll C.	Glendale	LD 42+13	359 Encina-*2485*
[5]Tolman, Frank Bronson A.B., Stanford, 1925	Stanford Univ.	Geol. gr.	506 Mayfield-*830*
Tomasini, Loring	Berkeley	Econ. 104+80	228 Toyon-*1711*
Tomilin, Michael I.	Palo Alto	Econ.‡41+31	1431Waverley,P-*568*
[4]Tomlin, Frank Earl B.S., Boston, 1920; Ed.M., Harvard, 1922	Soochow, China	Educ. gr.	335 Kipling, P-*2203*
Tomlinson, Alfred Thomas A.B., Stanford, 1929	Santa Barbara	Econ.84-98+8	593Salvatierra-*2173*
[4]Tompkins, Bernice Brooks A.B., Stanford, 1917, A.M., 1927	San Jose	Hist. gr.	SJ-Box 510, Rt. 3, sj

Tonge, Fred McLanahan — Palo Alto — Educ. gr. — 616 Forest, P-p
A.B., San Jose State Teachers College, 1928; A.M., Stanford, 1929
[4]Topham, Ethel E. J. — Palo Alto — Educ. gr. — 407 Cowper, P-p
A.B., California, 1922
[12]Topp, Thomas Martin — San Jose — S.Engr. 69·115+60 — Sigma Nu-*1385*
A.B., Stanford, 1929
Torbert, Harold Chester — San Diego — Phyl.-Med.49·148+195 — 514Enc-*106*
A.B., Stanford, 1929
[5]Tormey, Donald James — Spokane, Wash. — Educ. 28·138+77 — Pacific Grove-pg
Torrence, M. Dean — Palo Alto — Econ. 101–14 — Beta Theta Pi-*1335*
[4]Torvend, Chris S. — Patterson — Educ. gr. — Stanford Univ.
A.B., North Dakota, 1910; A.M., 1917
Tower, Myron F. — Lodi — LD 46·30+0 — 128 Encina-*1461*
Towle, Philip H. — Woodland — LD 44+19 — 115 Encina
Townley, Frances Jane — Stanford Univ. — LD 47+34 — 661 Cabrillo
[4]Townsend, Florence E. — Olympia, Wash. — Educ. gr. — 308 Roble
A.B., Washington, 1927
[23]Townsend, Irving D. — Campbell — Pre-Med.90·31–20 — 320Sequoia-*533*
[234]Townsend, John Eugene — Berkeley — LD 25–2 — 17 Encina-*1142*
[5]Tracy, Ralph Levi, Jr. — Santa Barbara — Bact. 21·107–16 — Theta D. Chi-*1828*
[34]Treat, David Brainerd — Phoenix, Ariz. — Engl. gr. — 344 Kipling, P-p
A.B., Yankton, 1924
Trigeiro, William Francis — Sebastopol — C.E. 148+32 — 306 Toyon-*907*
Trimingham, James Whitney — Sunol — S.Engr. 90·97+35 — 104 Sequoia
A.B., Stanford, 1929
Triplett, William Robert — Sacramento — S.Engr. 90·51+82 — 107 Sequoia-*86*
[4]Trombetta, Julius Caesar — Oakland — Educ. gr. — 650 San Juan-*2668*
A.B., Stanford, 1927
[5]Trone, Shirley Ronald — San Jose — Educ. gr. — 484 Spencer, SJ-sj
A.B., San Jose State Teachers College, 1928
[12]Troskoff, Nicholas — Baku, Russia — S.Engr. 90·63–24 — 321 Cowper, P-p
Troth, Hubert Carlyle — Owensmouth — LD 52+6 — 109 Toyon-*1219*
[7]Trotter, John Sickles — Honolulu, T.H. — LD 41+13 — 307 Encina-*732*
Troy, Dorothy — Slater, Mo. — Hist. gr. — 215 Roble
A.B., Stanford, 1929
[4]Troy, Maria — Fullerton — Educ. gr. — 251 Roble
A.B., Missouri Valley, 1926
[5]Truman, John Edwards — Oakland — Law gr. — 554 Encina-*2102*
A.B., Stanford, 1928
[1]Truman, Lloyd Hamilton — Oakland — S.Bus. gr. — 400 Channing, P-p
A.B., College of the Pacific, 1928
[1]Tuan, Hsu Chuan — China — Bot. gr. — Chinese Club-*1136*
A.B., Stanford, 1927, A.M., 1929
[4]Tubb, Margaret — Memphis, Tenn. — Ed.-G.A. gr. — 357 Roble
B.S., George Peabody College for Teachers, 1927
[12]Tuchler, Maier I. — San Francisco — LD 20·40+20 — 435 Encina-*2185*
[12]Tucker, James Bradley — Twin Falls, Ida. — Econ. 163+124 — 739Clmbia.,M-*2211*
[4]Tucker, Marion Turner — Ft.Klamath,Ore. — Engl. gr. — 1451 Cowper, P-p
A.B., Stanford, 1924
Tudor, Thomas Hubbard — Santa Barbara — LD 81–5 — 105 Branner-*2673*
[5]Tufts, Charles Kingsley — Torrance — Econ.-Acct.63·99+66 — 538 Alvarado
[4]Tully, Dorothy Grace — Palo Alto — Fr. ‡ — 154 Bryant, P-p
[4]Tupper, Clyde Warner — San Jose — Educ. gr. — 455 Forest, P-p
A.B., Arizona, 1924
[4]Tupper, James Tullius, Jr. — Fresno — LD ‡ — 113 Toyon
[4]Turk, Laurel Herbert — Greencastle, Ind. — Span. gr. — 535 Fulton, P-p
A.B., Missouri, 1924; A.M., Kansas, 1926

Turkel, Sigmund Ashur — Los Angeles — Pre-Clin.135·50+47 — 349Hmltn,P-p
A.B., Stanford, 1929
Turner, Albert Hamlin — Campbell — Chem. 90·48–4 — 105 Sequoia-*1177*
[23]Turnure, Dallas Richard — Portland, Ore. — LD 48·30+23 — 137 Encina
[4]Turrell, Archie Milton — Pasadena — Educ. gr. — 306 Toyon
A.B., Hillsdale, 1922; A.M., California, 1928
[1]Tussing, Ford Marlow — Palo Alto — S.Bus. gr. — 1500 University, P-p
A.B., Stanford, 1924
[5]Tvedt, Carl Walther — Maskell, Nebr. — Educ. gr. — 541 San Juan
A.B., Luther, 1923; A.M., Stanford, 1929
[4]Twaddell, Robert Quentin — San Francisco — LD — 1645 Filbert, SF-sf
[4]Tweedy, Ira — Rupert, Ida. — Educ. gr. — 525 Bowdoin, M-*1407*
B.S., Idaho, 1911
[4]Twelvetrees, John William — La Canada — LD — 538 Lasuen-*2398*
Twist, Gerald F. — Santa Ana — S.Engr. 88·45+17 — Delta Upsilon
[12]Twitchell, Vernon Bronson — Tilton, N.H. — Hist.90·17+6 — ThetaDeltaChi-*1828*
[23]Tyler, Donald McLaren — Pasadena — LD 54·40+17 — 219 Encina
Tyre, Norman — Los Angeles — Econ.93·48+66 — 901 Laurel, SM-sm
Uhl, George Meredith — San Francisco — Med. gr. — 2201 California, SF-sf
A.B., Stanford, 1928
[12]Ulrich, Carl Edward — Modesto — Econ. 90·32–17 — 212 Branner-*2668*
Ulrici, Dorothy Alma — Stockton — Hist. 23·76+90 — 446 Forest, P-p
Underwood, Franklin J. — Portland, Ore. — Pre-Med.147+159 — 119 Toyon-*2231*
[5]Upton, John Roland — Ontario, Canada — Pre-Med. 171+42 — 255 Toyon-*1613*
Urich, Morris Jackson — San Jose — Phil. gr. — 417 S. 8th, SJ-sj
A.B., Cincinnati, 1923
[4]Uriell, Vida Inez — San Jose — Educ. gr. — 145 S. 17th, SJ-sj
A.B., San Jose State Teachers College, 1928
[5]von Usedom, Liselotte — Sacramento — Germ. 90·47+27 — 384 Roble-*14*
Utt, Anita Lee — San Diego — LD 45·48+25 — 355 Roble-*2029*
Utt, Jean Elizabeth — San Diego — LD 88+55 — Kappa Alpha Theta
Utter, John William, Jr. — Anaheim — S.Engr. 90·51+38 — 435 Encina-*1975*
Vahey, George — Berkeley — Hist. 133+53 — 139 Toyon-*13*
[12]Valentine, Carl August — Pocatello, Idaho — Econ. 181+192 — 217 Toyon-*815*
A.B., Stanford, 1929
[134]Valentine,Edward Robinson — SanMarino — Econ. 119+51 — Alpha Delta Phi-*J*
[4]Valentine,FrancesLillian — Hiawatha,Kans. — Fr. gr. — 237 Roble
B.S., Kansas State Teachers College, 1927
*Valentine, William W. — San Marino — Geol. 141+52 — Alpha Delta Phi-*J*
Vandervort, Charles Thomas — Menlo Park — Law gr. — Menlo School, MP-mp
A.B., Stanford, 1917
Vander Zwiep, Phillip J. — San Francisco — Pre-Med. 105+64 — 212 Toyon-*2167*
Van Deusen, Paul — Los Angeles — LD 58+0 — 346 Encina-*2199*
Van Deventer, William — San Francisco — Med. gr. — St. Luke's Hosp., SF-sf
A.B., Stanford, 1926
[4]Van de Wetering, George — Lynden, Wash. — Engl. gr. — 650 Waverley, P-p
A.B., Washington, 1925
[4]Van Duzee, Mabel — Boulder, Colo. — Engl. gr. — 117 Roble-*1064*
A.B., Wellesley, 1922; A.B., Colorado, 1922
Van Etten, Robert Briant — Oakland — Soc.S.-Jn. 138+129 — 225 Toyon
[12]Van Fossen, Elinore Vesta — Dunsmuir — Soc.S. 145–13 — Alpha Om. Pi-*1367*
[4]Van Gilder, Bert Ira — Stockton — Econ. 135·33+30 — 304 Union
[23]Van Horn, Evelyn Adene — Denver, Colo. — Econ. gr. — Alpha Omicron Pi
A.B., Stanford, 1925
Van Loan, Richard E. — Los Angeles — LD 108+24 — 201 Branner-*1180*
Van Meter, Maxwell J. — Norwalk — Fr. 90·41–6 — 427 Encina

[3]Van Norden, Linda Carmel Engl. gr. 766 Santa Ynez
A.B., Stanford, 1924, A.M., 1927
[12f]Van Norden, Margaret Carmel Fr. 7·116+145 Kappa Al. Theta
[5]Van Nuys, H. Alan San Francisco Psych. 122–11 251 Toyon-*1977*
Van Rysselberge, Pierre J. Brussels, Belg. Chem. gr. 318 Union-*1188*
Engineer, Libredе, 1927; A.M., Stanford, 1928, Ph.D., 1929
[12]Van Sciver, Harry D. Robinsville, N.J. LD 31+0 444 Encina-*1622*
[3]Van Vleet, George, Jr. Fresno LD 65·30+27 583 Salvatierra
Van Zandt, A. Vernon Los Angeles Med. gr. 2321 Sacramento, SF-sf
A.B., Southern California, 1922
Varian, Russell Harrison Stanford Univ. Phys. gr. 430 Encina
A.B., Stanford, 1925, A.M., 1927
[4]Vaughan, Donald R. Highland Park, Ill. LD 135 Toyon-*1517*
[5]Vellenga, Peter E. Sneek, Holland Pol.S. 45·38+10 Japanese Club-*558*
[12]Vermilya, Robert H. San Francisco Econ. 180+40 Delta Upsilon
A.B., Stanford, 1929
Vernier, Robert Louis Stanford Univ. LD 46+47 679 Mirada
Vice, Leslie Thomas Vallejo LD 69–10 650 Waverley, P-p
[4]Viets, Louise Eleanor Long Beach Psych. ‡ 256 Roble
[4]Vigness, Paul G. Minneapolis, Minn. Hist. gr. 1144 Fulton, P-p
A.B., St. Olaf, 1918; A.M., Stanford, 1924
Vincent, Craig S. Grand Junction, Colo. Pol.S. 3·177+79 Del.TauDel.-*1363*
A.B., Stanford, 1929
Vincenti, Louis Rudolph Pasadena Law gr. 330 Union-*H*
A.B., Stanford, 1928
Visel, C. Wesley Los Angeles Econ. 133+60 Theta Chi-*1383*
Vogt, Paul Reuter The Dalles, Ore. LD 45+25 207 Encina-*2028*
Voigt, Fred V. San Francisco Econ. 69·63+0 201 Toyon
[5]Volland, D. Virginia Palo Alto Ed.-G.A. 183+91 1501 Bryant, P-p
[24]Voorheis, Virginia Grace San Francisco S.Let.90·75–3 Cedro Cottage-*2453*
Voorsanger, Jacob Henry Larkspur Chem. 180+31 205 Branner-*2753*
A.B., Stanford, 1929
[34]Wachter, Sibyl Toledo, Ohio S.Biol. gr. Madroño-*1072*
A.B., Wellesley, 1920
[4]Wade, Charles R. Santa Cruz Engl. gr. 241 Toyon-*626*
A.B., Southern California, 1924
[4]Wade, Edna Pugh Bingham, Utah Educ. gr. Madroño-*1144*
B.S., Utah, 1928
Waegele, Vera Carolyn San Francisco Med. gr. 3064 Sacramento, SF-sf
A.B., Kansas, 1923
Wagner, Charles Christian Stockton S.Bus. gr. 203 Toyon-*2592*
A.B., Stanford, 1928
Wagner, Edmond M. San Francisco M.E. gr. 128 Branner
A.B., Stanford, 1929
Wagner, Ernest Dean Santa Barbara Law gr. 146 Toyon-*2668*
A.B., Stanford, 1928
[5]Wagner, Paul Berthold Los Angeles Phys. gr. 542 Encina
B.S., California Institute of Technology, 1928
[5]Wagner, Robert Lowell Merced Pre-Med. 145+40 Chi Psi-*1648*
Waite, Russell Scott Riverside Law gr. 312 Sequoia-*2204*
A.B., Stanford, 1928
Waitzinger, Ludwig A. Stanford Univ. Bot. gr. 531 Harvard, M-*683*
B.S., Jena, 1912
[5]Wales, Joseph Howe Pasadena LD 44·62+15 129 Encina-*641*
Walford, Lionel Albert San Pedro Zoöl. 116·70+89 425 Encina-*2195*
A.B., Stanford, 1929
[13]Walk, Udell Clifford Santa Rosa LD 66+30 238 Branner-*1887*

Walker, Carlton William — Glendale — Econ. 135·47+13 — 328 Union-*1521*
A.B., Stanford, 1929
Walker, Edgar Lee — Wyatt, La. — Law gr. — 12 Union
A.B., Stanford, 1927
Walker, E. Wilfrid — Ben Lomond — S.Engr. 139+106 — 311 Sequoia
Walker, Frederick — New York, N.Y. — Econ.90·90+29 — Delta Kp.Eps.-*OO*
A.B., Stanford, 1929
[1]Walker, Eugene K. — Salt Lake City, Utah — Hist. 185+198 — 320 Encina-*628*
A.B., Stanford, 1929
[4]Walker, Eunice Townsend — Berkeley — S.Biol. gr. — Pacific Grove-pg
A.B., Reed, 1915
[4]Walker, Flora — San Jose — Educ.gr. — Conv.Notre Dame,RC-rc
A.B., San Jose State Teachers College, 1927
Walker, Homer Carroll — Beverly Hills — Soc.S. 95·49–20 — 222 Fulton, P-p
[5]Walker, James Eugene — Santa Ana — Pol.S. 90·54+34 — 304 Sequoia-*1681*
[1]Walker, John C. — Wilmington, Del. — C.E. gr. — 219 Ramona, P-p
A.B., Stanford, 1926
[4]Walker, Minnie McLaughlin — Willows — Educ. gr. — 613 Salvatierra
A.B., Valparaiso, 1895
Walker, Ralph J. — San Jose — Pre-Clin.4·182+91 — Al.Kp.Lm.-*658*
A.B., Stanford, 1929
Walker, Roland Douglas — San Francisco — Med. gr. — 2300 Webster, SF-sf
A.B., Stanford, 1926
Walker, William Burgess — Los Angeles — LD 45+51 — 238 Encina-*1902*
[4]Wall, Gladys Barr — Selma — Educ. gr. — 853 Channing, P-p
A.B., Redlands, 1920
[4]Wall, Helen Melissa — Fresno — Engl. gr. — 583 Lagunita-*1918*
A.B., Mills, 1926
Wall, Hugo — Palo Alto — Pol.S. gr. — 115 Alma, P-*2253*
A.B., Stanford, 1926
Wallace, Frances Wolcott — Bisbee, Ariz. — LD 46+4 — 260 Roble-*2226*
[13]Wallace, Gale Douglas — Piedmont — LD 94+6 — 140 Toyon
Wallace, Ralph Chester — Oakland — Econ. 121+120 — 241 Branner
Wallen, Jarvis Arthur — Pacific Beach — M.E. gr. — 333 Union-*1434*
A.B., Stanford, 1928
Walser, Hester Hazel — Palo Alto — LD 32·48+45 — 840 Bryant, P-p
Walsh, Raymond C. — Fairoaks — S.Engr.90·47+56 — 207Sequoia-*2148*
Walters, Milas Erle — Boise, Idaho — Econ. 145+96 — Sigma Al. Eps.-*1305*
Walton, Mary Piers — Burlingame — Econ. 90·96+116 — 264 Roble-*2014*
A.B., Stanford, 1929
[5]Wang, Cheng — Yunnan, China — Educ. 90·47+42 — Chinese Club-*2652*
[5]Wang, Feng Gang — Honan, China — Educ. gr. — 587 Alvarado-*813*
A.B., San Jose State Teachers College, 1927; A.M., Stanford, 1928
Wang, Leng — China — Pol.S. gr. — Chinese Club-*1296*
A.B., Virginia Military Institute, 1928; A.M., Stanford, 1929
[234]Wang, Thom Tong — Kiangsi, China — Educ. gr. — Chinese Club-*24*
A.B., National Central, 1927
Wanless, John Fred — Salt Lake City, Utah — LD 91+62 — 210 Branner-*2513*
Ward, Harrell Law — San Francisco — LD 67–9 — Sigma Alpha Eps.-*1305*
Ward, Helen Thornton — South Pasadena — Soc.S. 137+43 — Pi Beta Phi-*1918*
Ward, John Henry — Redlands — Med. gr. — 2321 Sacramento, SF-sf
A.B., Redlands, 1927
[4]Ward, Julia Mae — Skidmore, Mo. — Educ. gr. — Kingscote
B.S., Missouri, 1918; A.M., Columbia, 1922
[3]Ward, Mary Aloysius — San Francisco — Educ. gr. — Kingscote
B.S., Columbia, 1925
[5]Ward, Phebe Watkins — San Diego — Engl. gr. — 252 Kingsley, P-*674*
A.B., Stanford, 1928

[234]Ward, Robert William San Francisco Bact. gr. 1251 Hayes St., SF-sf
B.S., St. Ignatius, 1928
[5]Ward, William John Palo Alto Educ. 166+6 200 Fulton, P-p
Wardrip, Buford Haven San Francisco Med. gr. 2350 California, SF-sf
A.B., Redlands, 1925
Wardwell, Ralph Watts Bakersfield LD 43+11 245 Encina-*1463*
[5]Warfield, George Richard Healdsburg Phil. 17·84–9 137 Toyon-*583*
Warner, Clive Maples Maricopa LD 94+146 Delta Upsilon
Warner, Irwin Chauncey Riverside Econ. 139+86 214 Toyon-*575*
Warner, Stewart Clarke Riverside LD 50·44–5 203 Encina-*1452*
[4]Warren, Edward Joseph Vancouver, B.C. Educ. gr. 650 Waverley, P-p
A.B., Willamette, 1924
Warren, Grant Edward Modesto Chem. gr. 204 Sequoia-*2227*
A.B., Stanford, 1928, Engineer, 1929
[4]Warren, Harris Gaylord Kouts, Ind. Hist. gr. 1455 Cambridge, M
B.S., Purdue, 1926
Warren, Isabell Modesto LD 48+74 239 Roble-*2227*
[3]Washington, George Los Angeles LD sp. 10+11 18 Encina-*1196*
Watanabe, Lee Mitsuyoshi Fresno Med. gr. 2150 Bush, SF-sf
A.B., Stanford, 1927
[23]Waterman, Glenn Cotton Oakland LD 29+8 19 Encina-*1341*
Waters, Max A. Chico Med. gr. 2180 Washington, SF-sf
A.B., Stanford, 1926
Watkins, Isabel Stanley Columbia, S.C. Educ. gr. Madroño
A.B., South Carolina College for Women, 1915; A.M., Univ. of South Carolina, 1923
Watkins, James T., VI San Francisco Pol.S. 5·177+119 553 Encina-*2773*
A.B., Stanford, 1929
[234]Watkins, Robert P. San Francisco Zoöl. 5·121+122 526 Byron,P-*2773*
[23]Watson, Albert John San Mateo LD 26–1 249 Encina
[1]Watson,Campbell Hagerman LosAngeles Pre-Med.45·81+30 774 S.Ynez-*694*
[4]Watson, Elizabeth M. New Concord, O. Engl. gr. Escondite Cottage-*N*
A.B., Muskingum, 1928
Watson, Mary Louise San Francisco LD 88+3 Kappa Kappa Gamma
Watt, Tom McCourt San Francisco Econ. 98+16 Beta Theta Pi-*1335*
[4]Watts, Margaret Elizabeth San Francisco LD ‡ 264 Roble
Way, Harold Franklin Petaluma Law gr. 166 Bryant, P-*1803*
A.B., Stanford, 1928
[5]Way, Irene Lucile Petaluma Hist. gr. 200 Roble-*1803*
A.B., Stanford, 1929
Way, John Wilson, Jr. Pasadena Educ. 142+14 210 Sequoia-*1855*
Way, Stewart Pasadena Math. 181+206 210 Sequoia-*1855*
A.B., Stanford, 1929
Wayman, John E. W. Pasadena LD 43·19+2 219 Encina-*1727*
[4]Weage, Densmore C. Clovis Educ. gr. Cardinal Hotel, P-p
A.B., Fresno State Teachers College, 1929
Weaver, Albert S., Jr. Stockton Econ. 184+29 120 Toyon-*1992*
A.B., Stanford, 1929
[234]Weaver, Donald Bader Sacramento Phys. 90·32+26 307 Sequoia-*2206*
[234]Weaver, Homer Ellsworth Oberlin, O. Psych. gr. 334 Waverley, P-p
A.B., Oberlin, 1924, A.M., 1926
[5]Weaver, John Carrel Stockton LD 75–13 Phi Kappa Psi
Weaver, Sylva Titian Los Angeles Hist. 140+126 Kap. Kap. Gamma
[4]Webb, Barton Le Edgar Niles Educ. gr. Niles-Box 255, n
B.S., Kansas State Teachers College, 1927
[5]Webb, Harrison James San Francisco Econ. 90·78+52 536 Alvarado
[5]Webb, James R. Redlands Econ. 12·119+16 AlphaTauOmega
[4]Webb, Rebecca Frances Tucson, Ariz. Educ. gr. 159 Roble
A.B., Arizona, 1926

Webb, Richard Fouke	Covina	LD 49+10	302 Encina-*1701*
[1]Weber, Wallace A.	Modesto	Pol.S. 93·17+5	205 Emerson, P-p
Webster, George V. O.	Carthage, N.Y.	LD 42+4	352 Encina-*2481*
Webster, James Ashley	Vallejo	LD 86+0	146 Toyon-*947*
Webster, J. Scott	Los Angeles	Econ. 156+58	Phi Gamma Delta
[5]Weck, Frank Alan	Oakland	LD 84+20	205 Sequoia-*2334*
Weddle, Robert Parker	San Jose	LD 49+73	122 Encina
Weeks, Carrol Lamont A.B., Stanford, 1929	Los Angeles	Pre-Cl.135·50+16	451 Pnctn.,M-m
Weeks, Leslie Morhead	Grass Valley	LD 30+9	317 Encina-*716*
Weesner, Charles Clifford	Los Angeles	LD 62+20	Alpha Tau Omega
[5]Wei, Ming Hua	Honan, China	Educ. 90·36+2	959 Wvrly., P-*1763*
Weigle, Clifford Francis A.B., Stanford, 1929	Lomita Park	Soc.S.-Jn. 180+214	304 Brnr.-*1141*
Weinberg, Laurence Milton	Los Angeles	Soc.S. 145+101	202 Branner-*911*
Weinstein, Paula	Stockton	Math. 47·96+92	347 Roble-*2404*
[234]Weisman, Theodore A.B., Stanford, 1926	Los Angeles	Law gr.	535 Fulton, P-*36*
[13]Weiss, Earl Carlton A.B., Stanford, 1929	Los Angeles	Ec.-Ac. 111·77+42	202 Union-*1622*
[12]Welch, Jerome	San Francisco	LD 34–17	251 Encina
[4]Weldin, Winifred B.S., Columbia, 1919, A.M., 1924	Wilmington, Del.	Educ. gr.	Roble
[4]Weller, Evelyn McCormmack	Palo Alto	Ed.-G.A. ‡	115 Alma, P-p
[1]Weller, Fred Ames A.B., State College of Washington, 1925; J.D., Stanford, 1929	Palo Alto	Law gr.	115 Alma, P-p
[4]Weller, George Carl A.B., Whitworth, 1920	S. San Francisco	Educ. gr.	500 Baden, SSF-ssf
[1]Wells, Calvin Newlon	Palo Alto	LD 9–11	1147 Ramona, P-p
Wells, Ernest A.	Pasadena	LD 95+97	210 Sequoia
Wells, John Emmet	El Centro	LD 90+73	223 Toyon
Wells, Phillip A.B., Stanford, 1929	Pasadena	Phyl.-Med. 185+299	210 Sequoia
Wells, Ruth A.B., Stanford, 1929	San Francisco	Pre-Clin. 135·45+60	333 Roble
[4]Wells, Scott Carson	Piedmont	LD	121 Toyon
[2]Wells, Walker M. A.B., Stanford, 1928	Selma	Pre-Med. gr.	678 Mirada-*1305*
[4]Wempe, Catherine Elizabeth A.B., Dominican College, 1929	San Fr'cisco	Engl. gr.	112 Roble
Wendell, Paul Van Wagenen	Los Angeles	LD 40–1	349 Encina-*1881*
Wendt, Albert Richard	San Jose	S.Engr.142+37	100 N. Mkt., SJ-sj
Wenig, Herbert Edward	Great Neck,N.Y.	Hist. 115+11	226 Toyon-*2704*
Wentker, Carl Benedict A.B., St. Louis, 1927	St. Charles, Mo.	Phyl. gr.	400 Channing, P-p
Wentz, Kenneth Lee	Sunnyvale	LD 86+29	Sunnyvale-s
Werder, William Maddux	Redwood City	LD 30·86+60	Delta Tau Del.-*1363*
[3]Werner, Richard John B.S., Oregon State Agricultural, 1917; M.S., California, 1925	San Jose	Educ. gr.	Teachers College, SJ-sj
Werthman, Elizabeth Cecelia	Menlo Park	LD 45+11	Menlo Park-Bx 171,mp
Wessels, Arthur Lynn A.B., Stanford, 1929	Ukiah	Pre-Clin. 195+155	307 Brnr.-*2665*
Wessing, Lawrence E. A.B., Stanford, 1929	Sacramento	Ec.-Ac. 99·81+18	206 Union-*2056*
West, Arnold J.	Aberdeen, Wash.	LD 78–8	Sigma Chi
West, Catherine Campbell	Riverside	Hist. 152+135	Chi Omega

West, Cecil O.	Vancouver, B.C.	Hist. 27·158+119	Phi Delta Theta
A.B., Stanford, 1929			
[1]West, Charles Emerson	Palo Alto	LD 76–22	660 Palo Alto, P-p
West, Clarence C., Jr.	Porterville	S.Bus. gr.	415 Encina
A.B., Stanford, 1928			
[14]West, Elizabeth Dearing	Riverside	LD 9·66+105	Chi Omega
West, Robert Pierce	San Diego	Econ. 180+11	313 Toyon-*2802*
A.B., Stanford, 1929			
West, William Arthur	Camas, Wash.	LD 31–2	250 Encina-*574*
Westheimer, Jerome	Ardmore, Okla.	LD 86+72	349 Hamilton, P-*1054*
[1]Westigard, Clarence N.	San Mateo	M.E. gr. 44	SanMateoDr.,SM-sm
A.B., Stanford, 1924, A.M., 1925			
§[23]Westlake, Norman Elmer	SanFrancisco	LD 15·42–9	Theta Xi
[5]Weston, Janet Louise	Champaign, Ill.	Econ. gr.	117 Roble-*704*
A.B., Illinois, 1927			
Westsmith, Richard Alan	Los Angeles	LD 87+35	Pacific Grove-pg
Weyl, Bertin Alfred, Jr.	Los Angeles	LD 46+29	347 Encina-*1421*
Weyl, Edward	Los Angeles	Econ. 130+58	*226* Branner-*25*
Weymouth, Frank William	Palo Alto	LD 98+90	218 Sequoia-*1617*
Wheatley, John Brooks	San Francisco	M.E. 194+135	Alpha Tau Omega
A.B., Stanford, 1929			
[5]Wheaton, Palmer	San Francisco	S.Engr. 111+8	Alpha Delta Phi-*J*
[5]Wheeler, Ann Bradford	Stanford Univ.	Fr. 36·93+5	750 Dolores
[24]Wheeler, Howard True	Mountain View	Span. gr. 976	California, MV-mv
B.S., California, 1920; A.M., Stanford, 1929			
[12]Wheeler, Oliver Percival	Palo Alto	Econ. gr.	223 Portola, P-p
A.B., Stanford, 1920			
[1]Wheeler, Orby Clinton	Amarillo, Texas	Geol. gr.	650 Bowdoin, M-*1256*
A.B., Stanford, 1928			
Wheelis, John Minor, Jr.	Los Angeles	Med. gr.	*2323* Sacramento, SF-sf
A.B., Stanford, 1928			
Whitaker, Albert Merritt	Stanford Univ.	Geol. 114+26	544 Alvarado-*995*
[4]Whitaker, Anna	San Francisco	Engl. gr.	583 Lagunita-*1918*
A.B., Smith, 1909			
Whitaker, Joseph Eric	Mayfield	Engl.-P.Sp.90·90+2	476 F'do,M-m
A.B., Stanford, 1929			
Whitaker, Virgil Keeble	Spokane, Wash.	Cl.Lit. 22·170+305	132 Brnr.-*1503*
A.B., Stanford, 1929			
White, Douglas A.	Glendale	Econ. 118–15	ThetaDeltaChi-*1828*
White, Earl Lyleton	San Francisco	S.Biol.90·104+32	M'loH'ghts-*2511*
A.B., Stanford, 1929			
[5]White, Edward Arthur	Los Angeles	Hist. gr.	506 Mayfield-*2772*
A.B., Stanford, 1928			
[4]White, Ethel Helen	San Jose	Educ. gr. 716	E.Santa Clara,SJ-sj
A.B., San Jose State Teachers College, 1924			
White, Fillmore, Jr.	San Francisco	S.Engr. 90+32	Kingscote
[23]White, George Russell	Los Angeles	LD 29+22	13 Encina
[5]White, George Verne	Courtland	Educ. gr.	131 Jackson, RC-rc
A.B., Stanford, 1929			
White, Henry Gordon	Oakland	Econ.45·102+118	Phi Sig. Kp.-*538*
[4]White, Hugh Vernon	Stockton	Phil. gr.	304 Union-*877*
A.B., California, 1917			
[23]White, James Henry, Jr.	Los Angeles	Fr. 118–4	1401 Emerson, P-*2555*
[5]White, Juanita Emilie	San Francisco	S.Biol.184+103	Gam.PhiBeta-*1337*
White, Kenneth Ashbridge	Glendale	LD 86+11	Delta Upsilon
[234]White, Lois Aletha	Covelo	Ec.-Ac. 15·106+92	*322* Roble-*2494*

§ Deceased, May 21, 1929.

[1]White, Marian Adele — San Francisco — Educ. gr. — Gamma Phi Beta-*1337*
A.B., Stanford, 1927
[23]White, Marvin Fred — Lakewood, Ohio — LD 16–1 — 1401 Emerson, P-*623*
[4]White, Ralph Kirby — Farmington, Mich. — Psych. gr. — *220* Toyon-*1255*
A.B., Wesleyan, 1929
White, Ross Fletcher — Point Loma — Econ. 90-31–*23* — 313 Toyon-*1951*
White, Truman St. John — Fresno — LD 33–12 — 324 Encina-*535*
[12]White, William Earlton — KnightsLanding — LD sp.53+21 — 850Hamilton,P-*2803*
[4]White, William Thornton — Los Gatos — LD — 121 Toyon
Whitecotton, George Otis — Palo Alto — Med. gr. — Cardinal Hotel, P-p
A.B., California, 1923
[12]Whitehead,FrancesE. — Colo.Springs,Colo. — Hist. gr. — Madroño-*2314*
A.B., Saskatchewan, 1925, A.M., 1929
Whiteley, Frank Adams — Warren, Ariz. — LD 94+71 — Sigma Alpha Eps.-*1305*
Whiteley, Robert K. — Warren, Ariz. — Bact. 45-152+64 — Sig. Al. Eps.-*1305*
A.B., Stanford, 1929
Whitesel, Jack Harry — Los Angeles — Econ. 138+205 — Alpha Kp. Lm.-*658*
[4]Whitfield,GeorgeMcCabe — Tacoma,Wash. — Educ. gr. — Kingscote-*1216*
A.B., Puget Sound, 1925
[4]Whitney, Estella Dorothy — Milton, Ore. — Cl.Lit. gr. — *324* Emerson, P-p
A.B., Oklahoma, 1922
Whitney, George W. — Palo Alto — S.Engr. 90-84+8 — 819 Alma, P-p
Whitten, Mabel Anita — Burlingame — Engl. gr. — 815 Acacia, B-b
A.B., Stanford, 1928
[4]Wicher, Herbert W. — Stanford Univ. — Cl.Lit. gr. — 116 Toyon-*855*
A.B., Stanford, 1928
[12]Wickersham, James Baxter — Boise, Idaho — C.E. 71-121+72 — 406 Sequoia-*1372*
A.B., Stanford, 1929
Wickizer, Vernon Dale — South Pasadena — S.Bus. gr. — 686 Lasuen
Graduate, U.S. Naval Academy, 1925; M.B.A., Stanford, 1929
Widmann, Charles A. — Palo Alto — Pre-Med.139+92 — 450 Melville, P-p
[5]Wiedey, Lionel William — Alhambra — Geol. gr. — 228 Union-Box 761, p
A.B., California at Los Angeles, 1926; A.M., Stanford, 1928
[12]Wiedmann, Lucille Copple — Palo Alto — Math. gr. — 428 Guinda, P-*2637*
A.B., California at Los Angeles, 1926
[12]Wiedmann, Milton Laurence — Palo Alto — Phys. gr. — 428 Guinda, P-*2637*
A.B., Stanford, 1925, Engineer, 1926
Wieser, Henry Emil — Burlingame — S.Biol.90-47+32 — 817GrangeRd,B-b
Wiggins, Ira Loren — Palo Alto — Bot. gr. — 1020 Channing, P-*511*
A.B., Occidental, 1922; A.M., Stanford, 1925
Wight, Otis Martin — Portland, Ore. — LD 88+49 — Zeta Psi-*B*
Wihr, Norman Lester — San Francisco — Zoöl. gr. — 1976 21st Ave., SF-sf
A.B., California, 1928
[4]Wilbur, Edna — Berkeley — Fr. gr. — 303 Roble
A.B., Stanford, 1921
Wilbur, Leonard Fisk — San Francisco — Med. gr. — 2321 Sacramento, SF-sf
A.B., Stanford, 1928
[5]Wilcox, Floyd C. — Battle Creek, Mich. — Educ. gr. — 912 Waverley, P-p
A.B., Kalamazoo, 1910; A.M., Columbia, 1921
Wilcox, Leland F. — Kimball, Nebr. — Engl. 91-48+31 — 762 Dolores
Wilde, Drummond Frank — Piedmont — Law gr. — Delta Kappa Epsilon
A.B., Stanford, 1927
Wilde, Thomas Edward — Sacramento — Chem. 90-48+14 — 303 Sequoia-*2149*
[4]Wildes, Maxwell G. — Walnut — Zoöl. 90-8–30 — 210 Union
Wilkie, Bertha Helen — Pomona — Math. gr. — Menlo Heights-*1016*
A.B., Pomona, 1928
[4]Wilkinson, Ruth Dean — Burbank — Fr. gr. — 645 Gilman, P-p
A.B., Vassar, 1906; A.M., Middlebury, 1920

Wilkinson, Wilbur Ringo Los Angeles LD 43–12 326 Encina-*2702*
Wilkison, Wallace B. Twin Falls, Idaho Econ. 135·51+77 554 Encina-*1703*
A.B., Stanford, 1929
[1]Will, Otto Allen Colorado Springs, Colo. LD 138 Encina-*2533*
[4]Will, Robert James Sunnyvale Educ. gr. 252 McKinley, S-s
Ph.B., Wisconsin, 1923
Willard, Don Gaylord Tacoma, Wash. LD 47+54 401 Encina-*2381*
[4]Willbern, GlenDeWitt Brackettville, Tex. Fr. gr. 219 Toyon-*877*
A.B., B.S., Southwestern, 1923; A.M., Texas, 1928
[3]Willett, Richard D. Ventura LD 55·46–24 216 Branner-*103*
Williams, A. Otis Los Angeles Econ. 135+53 Delta Tau Del-*1363*
Williams, Ansel Smith, Jr. Stockton Econ. 88·45+15 145 Toyon-*872*
Williams, Conger Milwaukee, Wis. LD 43+20 357 Encina-*1794*
Williams, D. Harvey San Francisco LD 84+7 Theta Chi-*1383*
Williams, Dorothy Josephine Santa Cruz LD 49·39+4 256 Roble-*614*
Williams, Edwin Everitt Blythe LD 45+59 105 Encina-*1856*
[4]Williams, Elizabeth Moody Palo Alto Ed.-G.A. 154+37 351 Homer, P-p
[4]Williams, F. Sunshine Twin Falls, Ida. Ed.-G.A. gr. 175 Roble-*1327*
A.B., Stanford, 1927
Williams, George Chase Marshfield, Ore. Econ. 180+71 Sigma Chi-*628*
A.B., Stanford, 1929
[3]Williams, Gerald Arthur Stanford Univ. Educ. gr. Kingscote-*1983*
A.B., Stanford, 1929
[4]Williams, Grace Marion Madera Econ. gr. 583 Lagunita-*1918*
A.B., Stanford, 1928
Williams, Griffith Evan The Dalles, Ore. Pre-Med. 116+82 Sigma Nu-*1385*
[4]Williams, Isabel Grace Los Angeles Soc.S. ‡ 317 Roble
Williams, John Francis El Paso, Texas S.Engr.123·51+43 432 Encina-*1954*
[1]Williams, John Morris Douglas, Ariz. LD 42·66+25 Kappa Sigma-*1326*
[4]Williams, Louise San Francisco Fr. gr. 2700 Jackson, SF-sf
A.B., College of the Sacred Heart, 1925; A.M., Stanford, 1928
[4]Williams, Muzetta Butte, Mont. Educ. gr. 556 Lytton, P-p
A.B., Montana, 1924
[5]Williams, Philip Daniel San Diego Phys.135+146 736 Webster, P-*1436*
Williams, Rhona Palo Alto S.Biol. gr. 351 Homer, P-p
A.B., Stanford, 1929
Williams, Robert Case Wooster, Ohio Chem. gr. University Park-*2021*
A.B., Oberlin, 1925, A.M., 1927; Ph.D., Stanford, 1929
Williams, Roger Alling The Dalles, Ore. LD 40–13 345 Encina-*917*
[23]Williams, Sidney W. Washington, D.C. Hist. 120+102 Alpha Phi-*1387*
[5]Williams, Stanwood Ivers Los Angeles Geol. 105–2 Alpha Delta Phi
[5]Williams, Stephen San Francisco Hist. gr. 225 Sequoia
A.B., Stanford, 1929
Williams, Thomas Burton Los Angeles LD 87+27 107 Branner-*1571*
Williams, Winifred Hope Los Altos Engl.187+134 Los Altos-Bx 266,1a
A.B., Stanford, 1929
[5]Williamson, David A. Palo Alto Econ. 172+9 203 Toyon-*1547*
[4]Willibrand, William A. Freeburg, Mo. Germ. gr. 235 Union
A.B., Missouri State Teachers College, 1919; A.M., Chicago, 1921
[5]Willis, Margaret Stanford Univ. Phil. 102+30 Pi Beta Phi-*1918*
[5]Willits, John Metts Palo Alto Psych. gr. Willow Rd., P-Bx684,p
A.B., Stanford, 1925
Wilmar, Fred Berkeley LD 39+8 209 Encina-*2292*
[1]Wilson, Carl Robert Palo Alto LD 82–19 435 Tasso, P-p
[12]Wilson, Catherine Newell Los Angeles Hist. 180+34 Kappa Alpha Theta
A.B., Stanford, 1929
[4]Wilson, Edith Palo Alto Educ. ‡ 1020 Channing, P-p

Wilson, Edward William	Stanford Univ.	LD 96+57	515 University, P-*717*
[13]Wilson, Elwood Jasper	Stanford Univ.	Econ.190+16	515 University,P-*717*
[5]Wilson, Emerson J. A.B., Nevada, 1928	Reno, Nev.	Law gr.	128 Kingsley, P-p
Wilson, Jack Leroy	Hollywood	Ec.-Ac. 106+156	246 Toyon-*1433*
[12]Wilson, Jesse Harris	Santa Cruz	LD 66–14	Theta Delta Chi-*1828*
[4]Wilson, Leslie Edwin A.B., Stanford, 1922	Palo Alto	Geol. gr.	1020 Channing, P-p
[4]Wilson, Marian Udall A.B., California at Los Angeles, 1927	Pasadena	Span. gr.	335 Roble
Wilson, Pauline	Cupertino	LD 46+27	270 Roble-*1160*
Wilson, Philip Louis	Los Angeles	LD 45+33	222 Encina-*2041*
[4]Wilson, Ralph Waldo	San Diego	LD ‡	324 Union-*2398*
Wilson, Robert Henry A.B., Stanford, 1928, A.M., 1929	Burlingame	Engl. gr.	1557 Ralston, B-b
[12]Wilson, Robert Rogers A.B., Yale, 1925	Beverly Hills	Geol. gr.	210 Union-*1171*
Wilson, Thomas Strong A.B., Princeton, 1927	Portland, Ore.	Law gr.	556 Encina-*2018*
Wilson, Warren Andrew	Venice	Pre-Med. 121+9	Al. Tau Omega
Wilton, Frank Starr A.B., Stanford, 1929	Huntington Park	Soc.S.-Jn.180+61	Kappa Sig.-*1326*
[4]Winchell, Elizabeth Agnes A.B., Tabor, 1908	Santa Clara	Engl. gr.	1716 Liberty, SC-sc
[23]Wineberg, Dorothy Helen A.B., Stanford, 1928	Evanston, Ill.	Cl.Lit. gr.	368 Roble-*54*
[4]Winegardner, James Henry B.S., Idaho, 1921	Oakland	Educ. gr.	348 Kipling, P-p
[12]Wing, Frederic Sevier A.B., Stanford, 1929	Banning	Econ. 184+30	Matadero, M-*887*
Winger, Raymond Ralph	Whittier	S.Engr. 102·42+13	Chi Psi-*1648*
Winkler, Merrick Peck	Beverly Hills	Econ. 131+8	Chi Psi-*1648*
Winnek, Phil Stanley	San Diego	LD 108+134	Sigma Nu-*1385*
Winquist, Carl S.	Chicago, Ill.	S.Engr. 29·82+12	221 Toyon-*597*
[3]Winter, Max	Los Angeles	Econ. 132+63	Alpha Tau Omega
[23]Winterburn, John Charles B.S., Pittsburgh, 1923	Palo Alto	Educ. gr.	217 Madroño, P-*991*
Winther, Reidar	Long Beach	LD 46+66	248 Encina-*702*
Winton, Harry N. McQ.	San Francisco	LD 95+120	106 Sequoia-*1943*
Wiper, Robert Wohlwend	Bowbells, N.D.	LD 89+25	225 Toyon-*827*
Wiper, Thomas B. A.B., Arizona, 1924	Bowbells, N.D.	Med. gr.	2180 Washington, SF-sf
Wirt, Sheldon Kessinger A.B., Stanford, 1928	Long Beach	Fr. gr.	108 Sequoia-*1282*
[12]Wisdom, Park	Palo Alto	LD 26–15	169 Waverley, P-p
Wise, Bertha	Chico	LD 91+88	162 Roble-*2787*
[1]Wise, Fred Aleck A.B., Stanford, 1929	Virginia City, Nevada	Min.180+46	Delta Dau Delta-*1363*
[4]Wiseman, Lois A.B., Hastings, 1926	Wood River, Nebr.	Span. gr.	146 Roble-*826*
[4]Wisgerhof, Helen Arline A.B., Cornell College, 1929	Sully, Iowa	Educ. gr.	270 Kellogg, P-p
[12]Wist, Edward Burton	Alameda	LD 75+28	215 Sequoia-*1511*
Witherbee, Orville Orvus	Los Angeles	LD 86+25	Kappa Sigma-*1326*
[4]Withers, Edna F. A.B., Michigan, 1926	Three Rivers, Mich.	Educ. gr.	583 Lagunita-*1918*
[1]Witherspoon, Gertrude A.B., San Jose State Teachers College, 1929	Upper Lake	Educ. gr.	348 Roble-*582*

[5]Withington, Dennet — Palo Alto — Law gr. — 464 Churchill, P-p
A.B., Harvard, 1922
Wittausch, William Karl — San Mateo — S.Engr. 89-51+17 — 570 Mayfield
[1]Witte, Erwin F. H. — Redwood City — LD 45+46 — Redwood City-Bx 34,rc
Wittenau, Carl — Warren, Ariz. — LD 91+30 — Kappa Sigma-*1326*
Wittenberg, Mary Edna — Terre Haute,Ind. — Fr. 27-160+154 — 320 Roble-*595*
A.B., Stanford, 1929
[5]Woehlke, Dorothea — San Francisco — Pre-Med. 148+80 — DeltaGam.-*1366*
[5]Woehnert, Marion Russell — Buffalo, N.Y. — Soc.S. 87-84+87 — Kappa Kap. Gam.
[23]Woelz, Paul Patrick — Pittsburg — LD 47-28+4 — 105 Encina-*2754*
Woerner, Edna Ellen — Portland, Ore. — Econ. 181+120 — Chi Omega
A.B., Stanford, 1929
[4]Woerner, Louis P. — San Francisco — Germ. gr. — 164 Acton, SF-sf
A.B., St. Mary's, 1923
Wolcott, Alice Elizabeth — Burlingame — LD 43+19 — 823 Acacia, B-b
[4]Wolf, Annabel Rose — San Francisco — Hist. ‡ — 107 Roble-*604*
[124]Wolf, Carl Brandt — Palo Alto — Bot. gr. — 830 Cowper, P-p
A.B., Occidental, 1926; A.M., Stanford, 1927
Wolfe, Cameron Withgot — Berkeley — LD 77+128 — Zeta Psi-*B*
[12]Wolfe, Reese — Stanford Univ. — Pol.S. 43-109+41 — Zeta Psi-*B*
[1]Wolford, Harley H. — Sunnyvale — Educ. gr. — Sunnyvale-Box 534, s
A.B., Ashland, 1912; A.M., Chicago, 1918
Womack, Ellis Stanley — Oakland — LD 89+42 — Kappa Alpha
Wong, Alfred K. — Shanghai, China — Med. gr. — Chinese Club-*964*
A.B., Stanford, 1927
[3]Wong, Gumm Duck — Canton, China — M.E. gr. — Chinese Club
A.B., California, 1927
[5]Wong, Henry — Oakland — Econ. gr. — 135 8th St., O-*854*
A.B., College of the Pacific, 1928
[34]Wong, Ming Yan — San Francisco — LD 46–9 — 746 Santa Ynez-*2165*
[4]Wood, Austin B. — San Francisco — Psych. gr. — Los Altos-*561*
A.B., California, 1923; M.F., Yale, 1925
[5]Wood, Burton Daniel — Stanford Univ. — Law gr. — 555 Encina-*802*
A.B., Michigan State Normal, 1922; A.M., Stanford, 1925
Wood, Calvin Deloss — Hollywood — Soc.S.-Jn.9-171+89 — 304 Brnr.-*1291*
A.B., Stanford, 1929
Wood, David Alvra — Gooding, Idaho — Med. gr. — 720 Fell, SF-sf
A.B., Stanford, 1926
Wood, Dennistoun, Jr. — Palo Alto — Chem. gr. — 809 Lincoln, P-p
A.B., Stanford, 1927, A.M., 1928
[5]Wood, George Archie — Gooding, Idaho — Pre-Med. 133+128 — Pacific Grv.-pg
Wood, Ira Eaton — San Jose — E.E. gr. — 525 S. 6th, SJ-sj
A.B., Stanford, 1928, Engineer, 1929
[2]Wood, James Oscar — San Jose — Engl. gr. — 251 Singletary, SJ-sj
A.B., Oklahoma, 1922; A.M., California, 1925
Wood, Lewis Jeremiah — Hollywood — LD 42+28 — 400 Encina-*1168*
Wood, Lucian Fox — Niles, Mich. — C.E. 185+123 — ThetaDeltaChi-*1828*
A.B., Stanford, 1929
Wood, Margaret Louise — Campbell — Fr. gr. — 107 Roble-*2544*
A.B., Stanford, 1928, A.M., 1929
Wood, N. Marian — Los Angeles — Med. gr. — 3099 Washington, SF-sf
A.B., Stanford, 1926
Wood, Quentin Lee — Seattle, Wash. — LD 48+5 — 249 Encina-*2722*
[5]Wood, Roy Wilmer — Lansing, Mich. — Econ. 45-120+19 — Theta Chi
Wood, Walter Jordan — Palo Alto — C.E. 180+79 — 2420 Tasso, P-*26*
A.B., Stanford, 1929
Woodhouse, Edwin Deshler — Los Altos — S.Biol. gr. — Los Altos-*1210*
B.S., California, 1919; A.M., Stanford, 1929

[5]Woodruff, Neville Ernest	San Francisco	Econ. 88·28–7	Kappa Alpha
Woods, Ward Wilson	Oakland	LD 46+73	13 Encina-*1755*
Woodward, F. Martin	Oakland	Econ. 180+152	Sigma Nu-*1385*
A.B., Stanford, 1929			
[4]Woodward, Harry R.	Hot Springs, S.D.	Educ. gr.	804 Waverley, P-p
A.B., Dakota Wesleyan, 1916			
[4]Woodward, Katharine B.	Portsmouth, Va.	Span. gr.	Madroño
A.B., Vanderbilt, 1919			
Woodworth, Denny	San Francisco	LD 44+42	31 Encina
Woodyatt, Daniel B.	Palo Alto	LD 80+10	Delta Chi-*1128*
Woodyatt, Elizabeth R.	Palo Alto	Engl.134+86	1425 Stanf'd,M-*1128*
[12]Wool, Fred Austen	San Jose	Law gr.	319 Encina-*2668*
A.B., Stanford, 1927, J.D., 1929			
[4]Wooldridge, Eyla Walker	San Carlos	Educ. gr.	San Carlos-sc
A.B., Oregon, 1917			
[5]Woolley, Eola Claire	New Orleans, La.	Phyl. gr.	347 Ramona, P-p
A.B., Tulane, 1926; A.M., Stanford, 1928			
[23a]Woolsey, Elwood L.	Berkeley	Pre-Med.99·29+2	531Hnovr.,M-*20*
[4]Wooster, Earl	Winnemucca, Nev.	Educ. gr.	828 Cowper, P-p
A.B., Nevada, 1921			
[34]Wooster, Ruth Constance	Cupertino	Chem. gr.	339 Roble-*1126*
A.B., Stanford, 1927			
[12]Wootan, John Thomas, Jr.	San Gabriel	LD 44+15	Sigma Chi-*628*
[1]Worden, Richard Carl	San Jose	Educ. 158+43	717 Bryant, P-p
[13]Work, John Franklin	Pacific Grove	Econ. 15·119+90	Theta Xi
[4]Wormser, Robert	Santa Barbara	Educ. gr.	1400 Waverley, P-p
A.B., Harvard, 1922			
[23]Worsley, Wallace A., Jr.	Los Angeles	LD 55+1	Theta Xi
Worthington, Frances Lyman	Thermal	Engl. 90·90+62	Al. Omi. Pi-*1367*
A.B., Stanford, 1929			
Worthington, William	Los Gatos	Econ. 182+39	Delta Upsilon
A.B., Stanford, 1929			
Wotring, Ellsworth M.	Spokane, Wash.	Econ. 143+205	125 Branner-*1405*
Wren, Robert M. W.	Auburn	LD 11·90+94	306 Sequoia-*2283*
Wrenn, Charles Gilbert	Salem, Ore.	Educ. gr.	261 Hawthorne, P-p
A.B., Willamette, 1926; A.M., Stanford, 1929			
Wright, Alvah Bruce	Globe, Ariz.	LD 46+77	228 Encina-*1883*
[3]Wright, Bernice Margaret	Pasadena	Soc.S. 87·13+18	360 Roble-*591*
[3]Wright, Calvin Everett	Burley, Idaho	Soc.S.76·66+43	200 Branner-*1974*
[2]Wright, Carlton	Glendora	LD 21–24	564 University, P-p
Wright, Chester Clay	Heyburn, Idaho	S.Biol. gr.	718 Bryant,P-Bx1024,p
B.S., Idaho, 1923			
Wright, Donald Richard	Pasadena	Pol.S. 180+147	Zeta Psi-*B*
A.B., Stanford, 1929			
[5]Wright, Editha F.	San Francisco	Anat. gr.	363 Roble-*1817*
A.B., Stanford, 1929			
[1]Wright, J. Odell	Idaho Falls, Idaho	LD 52–27	Delta Upsilon
Wright, Muirson C.	Oakland	Econ. 131+22	Theta Chi-*1383*
Wright, Ralph Wesley	San Jose	Med. gr.	2136 California, SF-sf
A.B., Stanford, 1926			
Wright, Richard Ewing	San Luis Obispo	LD 98+141	138 Toyon-*1764*
Wright, Whitney Jones	San Jose	LD 5·87+30	Theta Chi-*1383*
Wu, San-To	Ninghsia, China	Educ. 90·36–15	Chinese Club-*1623*
[5]Wu, Shu-Pan	Tientsin, China	Educ. gr.	225 Roble-*894*
A.B., Stanford, 1929			
[4]Wulfing, Gretchen	Hollister	Educ. gr.	247 Roble
A.B., Stanford, 1927			

Wulzen, Richard Henry	San Francisco	LD 47+26	246 Encina-*1533*
Wyatt, Dorothea Edith	San Francisco	Hist. 140+168	366 Roble-*977*
[4]Wyatt, Francis D.	San Mateo	LD ‡	216 E. Bellevue, SM-sm
[7]Wyckoff, James Allen	Watsonville	Law ‡	245 Toyon
[134]Wyman, Ada Fay A.B., California, 1925	Palo Alto	Pol.S. gr.	556 Lytton, P-p
Wyman, Frances Marie A.B., Stanford, 1929	Glendale	Econ. 182+41	Delta Del. Del.-*1325*
[5]Wynn, Carol Glenn A.B., Stanford, 1928	Pasadena	Law gr.	Phi Delta Theta
Wynne, David Evans	Ontario	Hist. 90·47+32	Kingscote
[4]Yardley, Hattie Florence A.B., Colorado State Teachers College, 1917, A.M., 1928	Greeley, Colo.	Educ. gr.	Forest Apts., P-p
Yarnell, George Alfred	Stanford Univ.	LD 99+29	513 Encina-*2351*
[4]Yates, Charles Dennis A.B., Otterbein, 1911; M.S., Idaho, 1927	Kellogg, Idaho	Educ. gr.	2060 Emerson, P-p
Yeazell, Edward Campbell	San Francisco	LD 79+15	Alpha Tau Omega-*1384*
Yeazell, Frances	San Francisco	Soc.S. 9·127+83	Delta Gam.-*1366*
[5]Yen, Kuei	Kiangsi, China	Pol.S. 90·45–10	635 Bryant, P-p
Yeomans, Andrew	Ojai	Pre-Med.119+52	Rbl.Rdg.,M-*1304*
Yeomans, Helen Eva	Spokane, Wash.	Cl.Lit. 15·141+269	212 Roble-*33*
[5]Yeon, John Baptiste, III	Portland, Ore.	LD 31+27	39 Encina-*2376*
Yeon, M. Pauline	Portland, Ore.	LD 4·79+68	Kappa Kappa Gamma
[1]Yerington, Hollis M. A.B., Stanford, 1929	Palo Alto	Hist. 182+79	Gam. Phi Beta-*1337*
Yoakum, Frank B. A.B., Stanford, 1927, J.D., 1929	Beverly Hills	Law gr.	Kappa Alpha
[4]Yocum, Josephine Ada A.B., State College of Washington, 1927	Portland, Ore.	Fr. gr.	207 Roble
[3]Youd, James T.	Merced	M.E. 142+83	527 Encina-*605*
Young, Barbara	Sacramento	LD 69·43+57	332 Roble-*2546*
¶Young, Edward Joseph A.B., Stanford, 1929	San Francisco	Cl.Lit. 187+236	251 Toyon
[1]Young, Forest Herbert	Stanford Univ.	C.E. 44–43	Phi Sigma Kappa-*538*
Young, Forrest Orville J. A.B., Redlands, 1926	Redlands	Med. gr.	2402 California, SF-sf
Young, Frank W.	Oregon City, Ore.	LD 84+23	302 Sequoia-*1095*
Young, Graham Temple	Glendale	LD 90+33	Delta Upsilon
Young, John Kiger	San Diego	Pre-Med. 132+84	Del.T.Del.-*1363*
Youngreen, Donald Rodford	Upper Lake	Econ. 119+19	202 Sequoia
[4]Younkin, Daniel G. B.S., Arizona, 1924	Tempe, Ariz.	Educ. gr.	627 Emerson, P-p
[4]Younkin, Fay Lucile A.B., Tempe Teachers College, 1929	Tempe, Ariz.	Educ. gr.	627 Emerson, P-p
[1]Zaches, Russell H.	Monterey	Econ. 106+48	132 Toyon-*36*
Zahn, Ellsworth Edwin A.B., Stanford, 1929	San Jose	Phil. 90·90+83	535 S. 10th, SJ-sj
Zaiser, Burt Frederick A.B., Stanford, 1929	Santa Ana	Econ.102·80+45	1506 Clg.,M-*2396*
Zandmer, Herbert Morton A.B., Stanford, 1928	Los Angeles	S.Bus. gr.	115 Branner-*1437*
[12]Zeh, Carl James A.B., Stanford, 1929	San Carlos	Econ.90·91+11	SanCarlos-Bx84,sc
Zellhoefer, Mildred Louise A.B., Occidental, 1925	Alhambra	Hist. gr.	Madroño-*2662*
[3]Ziegler, James E., Jr.	San Francisco	LD 61–4	16 Belmont, SF-sf
Zipf, Albert Fairfield	San Francisco	LD 48+74	322 Encina-*2757*

Zitkowski, Dorothy Verges	Denver, Colo.	LD 89+145	Kappa Alpha Theta
Zitkowski, Frederick A. A.B., Stanford, 1928	Denver, Colo.	Law gr.	503 Encina-*1855*
Zombro, Fred Bicknell A.B., Stanford, 1929	Los Angeles	Pre-Clin. 7·184+144	Phi Del. The.
[4]Zschokke, Ann T.	Palo Alto	Pub.H. 86+61	526 Forest, P-p
Zschokke, Theodore Oscar	Palo Alto	LD 111+63	Pacific Grove-pg
[5]Zumwalt, Margaret J.	San Francisco	LD 109+127	Chi Omega
[12]Zwick, Charles Law	Oxford, Ohio	Soc.S. 112·18–8	Phi Delta Theta

SUMMARIES

OFFICERS

Trustees		15
Academic Council—rank of		
Professor	157	
Associate Professor	72	
Assistant Professor	35	
Total (less 8 absent on leave)		256
Other Teaching and Administrative Officers—rank of		
Emeritus Professor	27	
Clinical Professor	10	
Associate Clinical Professor	17	
Assistant Professor	25	
Assistant Clinical Professor	17	
Lecturer	34	
Instructor	77	
Clinical Instructor	43	
Associate	4	
Administrative Officer	73	
Total (less 10 absent on leave)		317

Assistants

	At Stanford	At San Francisco		
Instruction	89	57	146	
Research	33	6	39	
Technical	64		64	
Administration	99	5	104	
Library	31	1	32	
Nursing		24	24	
Total				409
Grand Total				997

STUDENTS

	Autumn	Winter	Spring	Summer	For the year
Graduates	796	779	791	787	1540
Undergraduates	2673	2592	2409	612	3114
Special Students	14	13	3	6	20
Total	3483	3384	3203	1405	4674

BY MAJOR SUBJECTS

	Graduate	Undergraduate	Special	Total
Biology, School of	28	23	—	51
Anatomy	5	1	—	6
Bacteriology	5	16	—	21
Botany	21	2	—	23
Physiology	6	13	—	19
Pre-Medical	3	81	—	84
Public Health Nursing	—	3	—	3
Zoölogy	21	24	—	45
Business, Graduate School of	63	—	—	63
Education, School of	—	—	—	—
Education	432	76	1	509
Graphic Art	12	26	—	38
Engineering, School of	—	173	—	173
Civil	12	17	—	29
Electrical	23	—	—	23
Mechanical	16	11	—	27
Military Science	—	8	—	8
Mining and Metallurgy	15	3	—	18
Law, School of	216	13	—	229
Letters, School of	—	6	—	6
Classical Literature	15	14	—	29
English	95	70	—	165
Public Speaking	11	23	—	34
Germanic Languages	11	7	—	18
Romanic Languages	—	—	—	—
French	23	23	—	46
Spanish	32	21	—	53
Lower Division	—	1366	19	1385
Medicine, School of	147	—	—	147
Pre-Clinical	—	28	—	28
Physical Education and Hygiene	1	—	—	1
Physical Sciences, School of	2	4	—	6
Chemistry	62	60	—	122
Geology	23	37	—	60
Mathematics	18	14	—	32
Physics	17	7	—	24
Social Sciences, School of	5	81	—	86
Economics	59	499	—	558
Accountancy	2	27	—	29
History	65	114	—	179
Journalism	3	44	—	47
Philosophy	9	25	—	34
Political Science	35	123	—	158
Psychology	27	31	—	58

BY RESIDENCE

California	3559	Wyoming	13	Vermont	1
Oregon	149	New Jersey	11	China	47
Washington	113	Massachusetts	10	Hawaii	25
Arizona	73	Washington, D.C.	8	Canada	20
Idaho	53	Louisiana	7	Philippine Islands	13
Utah	51	South Dakota	7	Japan	11
Texas	48	North Dakota	6	Belgium	3
Colorado	37	Wisconsin	5	Germany	3
Illinois	34	Alabama	3	Alaska	2
Missouri	32	Florida	3	Chile	2
New York	31	Kentucky	3	England	2
Ohio	30	Virginia	3	Peru	2
Montana	29	West Virginia	3	Australia	1
Iowa	28	Arkansas	2	Brazil	1
Nevada	26	Connecticut	2	Holland	1
Oklahoma	26	Delaware	2	India	1
Michigan	19	Georgia	2	Mexico	1
Nebraska	19	New Hampshire	2	Porto Rico	1
New Mexico	18	Tennessee	2	Russia	1
Kansas	17	Mississippi	1	Scotland	1
Indiana	15	North Carolina	1	Siberia	1
Minnesota	14	Rhode Island	1	Switzerland	1
Pennsylvania	13	South Carolina	1	Venezuela	1

STANFORD ALUMNI ASSOCIATION

CONSTITUTION

Adopted June 21, 1924

The Stanford Alumni Association is organized to promote the common interests of Stanford, its graduates and former students, as represented by the activities of the University.

ARTICLE I: MEMBERSHIP

SECTION 1.—Any person who has been a registered student at Stanford University is eligible for membership in this Association, and may become a member by payment of the annual dues; provided, however, that only members having bachelor's degrees from Stanford University shall be eligible to any elective office in this Association.

SEC. 2.—All members of the faculty of Stanford University are honorary members of this Association.

ARTICLE II; OFFICERS

SECTION 1.—The officers of this Association shall be the Alumni Council, consisting of nine elected members, three of whom shall be graduates of not less than ten years' standing; three of whom shall be graduates of not less than five years' standing; and three from any class as may be selected by the nominating committee, and who shall be elected for three-year terms with terms so arranged that but three members will retire in any one year; provided, however, that the members of the Advisory Board now in office, whose terms have not expired, and those elected in June, 1924, shall remain in office for the term for which they have originally been elected; one representative, elected by each graduating class, whose term shall be one year after graduation; and one representative from each local alumni club now organized or which may be hereafter organized with the approval of the Association and having a membership in good standing of at least one hundred graduates or former students, and for each additional one hundred like members in good standing the alumni club shall be entitled to one additional representative. The University Alumni Secretary shall be *ex officio* a member of the Alumni Council.

The club representatives shall be elected annually by the respective clubs.

On or before June 15 of each year, the several clubs shall furnish the Secretary of the Alumni Association with the name of the representative or representatives chosen for the year beginning September 1.

SEC. 2.—The Alumni Council shall have general charge of all the affairs of the Alumni Association and the management of all its funds and properties. It shall have full power, and it shall be its duty to carry out the purposes of the Association according to the articles of the Association.

SEC. 3.—The Alumni Council shall elect: (1) a President; (2) a Vice-President; (3) a Secretary-Treasurer, and (4) an Executive Committee. These officers shall be selected from, and the committee composed of, the

nine elected members of the Council and the University Alumni Secretary, and shall be elected annually at the first regular meeting of the Council.

ARTICLE III: DUTIES OF OFFICERS

SECTION 1.—It shall be the duty of the President to preside at all business meetings of the Association; to submit for the Alumni Council an annual report of the affairs of the Association; and to perform such other duties as usually belong to this office. The President shall be *ex officio* member of all committees.

SEC. 2.—It shall be the duty of the Vice-President to preside in the absence of the President, and to perform all other duties belonging to this office.

SEC. 3.—The Secretary-Treasurer shall keep the minutes of all meetings of the Association and of the Executive Committee; shall have the custody of all the books and papers; shall collect the fees and dues of members, and all moneys due or coming to the Association, and shall pay the same over to the bank or depositary of the Association. He shall disburse the funds of the Association under the direction of the Executive Committee. He shall keep the records and conduct the general correspondence of the Association, and make such reports to the Alumni Council as may be requested. He shall be *ex officio* member of all committees.

SEC. 4.—The Executive Committee shall have all the powers of the Alumni Council when the Council is not in session, unless the Alumni Council shall, by a vote of two-thirds of those present, reserve certain powers unto itself. It shall be the duty of the Executive Committee: (1) to regulate the finances of the Association; (2) to pay the Secretary-Treasurer an adequate salary for services performed; (3) to direct the publication of the *Stanford Illustrated Review,* employing the editorial staff and supervising the general policy of the *Review;* (4) to have the accounts of the Association audited at least once each year and report the audit to the Association; (5) to fill, for the unexpired term, all vacancies occurring by death, resignations, or otherwise; (6) to arrange for the program presented on any public occasion for or by the Association; (7) to perform such other duties as may be imposed upon it by the Council; (8) to attend to all the business of the Association not otherwise provided for in this constitution; (9) to canvass and secure recommendations from the local alumni clubs for candidates to be nominated for the Stanford National Board; (10) to appoint alumni members of the Board of Athletic Control, Union Board, or other boards or committees that the Alumni Association has authority to select, or desires to appoint; (11) to consult the alumni, undergraduates, faculty, and trustees, when it deems it advisable, in order to make recommendations regarding the welfare of the University and of the Alumni Association.

ARTICLE IV: DISTRICT DIVISIONS

SECTION 1.—In order to bring the local alumni clubs and the general Alumni Association into closer relationship, the territory covered by alumni clubs shall be divided into twenty-two districts by the Alumni Council, as follows: (1) The Pacific Northwest; (2) the Southwest; (3) Central Mountain States; (4) Middle West; (5) Lake Region; (6) New England; (7) New York; (8) Middle Atlantic States; (9) the South; (10) Hawaiian and Philippine Islands; (11) Foreign Countries; and in California, a district corresponding with each Congressional District.

SEC. 2.—Each local organization shall be known as the Stanford Alumni Club of ———.

SEC. 3.—The name "Associated Stanford Alumni Clubs" shall be used at all district and national meetings of alumni clubs.

SEC. 4.—An annual meeting of each district shall be held at such time and such place as the officers of each district shall designate.

ARTICLE V: NOMINATIONS AND ELECTIONS

SECTION 1.—The February issue of the *Stanford Illustrated Review* shall give notice of the annual nomination and election of officers of this Association. Said notice shall contain the names of the incumbent officers, and shall indicate the holdover members of the Alumni Council, and shall contain in full the provisions of this constitution relating to nominations and elections.

SEC. 2.—The Executive Committee shall each year appoint a nominating committee of five members of the Council, at least three of whom shall not be members of the Executive Committee. The nominating committee shall make its report to the Executive Committee each year by the fifteenth day of March.

SEC. 3.—Nominations may be made also by petition. A nominating petition must be signed by at least fifty members of the Association and must be filed in the office of the Secretary-Treasurer on or before the first day of April of the year for which the nomination is made, and shall be valid only if the consent of such petition is endorsed thereon by the person in whose behalf such petition is filed.

SEC. 4.—On or before the fifteenth day of April of each year, the Secretary-Treasurer shall mail to every member of this Association whose dues for the current year have been paid, an official ballot containing all the nominations, with the addresses of the nominees and the number of proposers of each, and said ballot shall be published in the April issue of the *Stanford Illustrated Review;* provided, however, that where no contests occur, the Secretary-Treasurer shall be empowered to cast the ballot.

SEC. 5.—Officers shall be elected at an annual election to be held at Stanford University on Alumni Day, between the hours of 9 o'clock A.M. and 12 o'clock NOON. The Executive Committee shall have charge of the election. The elector may cast a written ballot in person, or by mail, addressed to the Secretary-Treasurer, marked "Ballot" and disclosing the sender's name, and enclosing a ballot in a plain envelope. Ballots so received shall be opened and cast only during the hours of election. The respective candidates receiving the highest number of votes shall be declared elected. A tie vote shall be decided by lot.

SEC. 6.—No one whose annual dues are in arrears for the current year shall be entitled to vote or to hold office.

ARTICLE VI: DUES

SECTION 1.—The dues of the Association shall be $3.00 per year for each member thereof, which amount shall include a subscription to the monthly alumni publication, *provided, however, that for a second member of a family living in a house in which there is already one full membership, the dues, not including a subscription to the monthly alumni publication, shall be $1.50 per year.*

SEC. 2.—A member, upon payment into the treasury of the sum of fifty dollars ($50.00), at any one time and for that purpose, shall be entitled to a life membership in this Association, including a life subscription to the monthly alumni publication, and shall not be liable for any further dues, *provided, however, that for a second member of a family living in a house in which there is already one full life membership, the life membership dues, not including a life subscription to the monthly alumni publication, shall be $25.00.*

SEC. 3.—All members who, prior, to May, 1908, have paid $5.00, shall, if they desire, be exempt from further dues.

ARTICLE VII: FUNDS

SECTION 1.—The receipts from dues and from miscellaneous sources, and the interest from life memberships, shall be known as the current fund and shall be used for the current expenses of the Association.

SEC. 2.—At the end of each current year, or at prior time if so directed by the Executive Committee, all sums in the current fund in excess of two thousand dollars shall be transferred to the reserve fund. All sums thus transferred from the current fund to the reserve fund shall be deposited in trust with the Board of Trustees of Stanford University, to be invested.

The income earned by the reserve fund may be withdrawn from time to time as directed by the Alumni Council, to be used for the purposes of the current fund; but there shall be no such withdrawal during any one year of an amount in excess of the earnings of the reserve fund for the year next preceding the year of such withdrawal.

SEC. 3.—At such time as the reserve fund shall exceed the principal amount of twenty-five thousand dollars, then all sums in excess of said principal sum of twenty-five thousand dollars at the end of each current year may be used for the purposes of Stanford University at such time and in such amounts as may be determined by the Alumni Council, with the advice and consent of the Board of Trustees of the University.

SEC. 4.—The Alumni Council may accept donations of funds for the promotion of the purposes of the Alumni Association, and shall apply such donated funds according to the conditions specified by the donor. Such funds shall be deposited in trust with the Board of Trustees of Stanford University, and may be withdrawn by the Alumni Council and expended only as specified in the trust created by the donor.

ARTICLE VIII: MEETINGS

SECTION 1.—Of the Association. The annual meetings shall be held on Alumni Day of each year, and other meetings of the Association shall be held at such time as the Executive Committee shall determine. Notice of meetings of the Association shall be mailed by the Secretary to all members of the Alumni Council and to all alumni clubs, at least thirty days prior to the time of holding the meeting. All meetings of the Alumni Association shall be held at Stanford University.

SEC. 2.—Of the Alumni Council. There shall be a spring meeting of the Alumni Council each year at Stanford University, the exact time to be determined by the Executive Committee. Special meetings of the Alumni Council may be called at any time by the President or by a majority of the

Executive Committee, but notice of such meetings and of the regular meeting must be mailed to each member at least four weeks in advance. In the case of special meetings, the Secretary-Treasurer shall specify the object or objects for which the meeting is called, and no business shall be transacted at such meeting other than that specified in the notification of the meeting.

SEC. 3.—Of the Executive Committee. The Executive Committee shall meet at regular stated intervals to be determined by the committee. Special meetings shall be held at the call of the President of the Alumni Council, or of a majority of the members of the committee, the place and purpose of the meeting to be designated in the notice of the meeting.

ARTICLE IX: QUORUM

A quorum shall consist, in the Association, of twenty-five members; in the Alumni Council, of twelve members; and in the Executive Committee, of five members.

ARTICLE X: AMENDMENTS

Any proposition to alter or amend these articles of Association must be proposed in writing, signed by one hundred members, and submitted to the members by mail in printed form by the Secretary-Treasurer, and voted upon in the same manner as are nominations for officers, and adopted by a majority vote.

ARTICLE XI: RULES OF ORDER

Robert's Rules of Order shall govern in all cases not provided for by the foregoing by-laws.

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STANFORD UNIVERSITY
AND VICINITY
SCALE 0 500 1000 1500 2000 2500 3000 FEET
1/4 1/2 MILE
1928
PALO ALTO
STANFORD
LAGUNITA
STADIUM
POLO FIELD
VARSITY BASE BALL FIELD
BASE BALL
FOOT BALL
VARSITY TENNIS COURTS
FACULTY CLUB TENNIS COURTS
PALO ALTO HIGH SCHOOL
STATE HIGHWAY
UNIVERSITY AVE.
PENINSULAR RY.
ENCINA AVE.
PARK BLVD.
PARK BOULEVARD
STANFORD AVE.
PAGE MILL ROAD
FOOTHILL ROAD
LOUIS ROAD
MIDDLEFIELD ROAD
EMBARCADERO ROAD
SANTA RITA ROAD
OREGON AVE.
SEALE AVE.
WEST COAST MILITARY ACADEMY
GRAMMAR SCHOOL
MUNICIPAL WATER WORKS POWER PLANT & SWIMMING POOL
RINCONADA PARK
HOSPITAL
CASTILLEJA SCHOOL
KELLOGG
CHURCHILL
COLERIDGE
LOWELL
TENNYSON
SEALE
RINCONADA
SANTA RITA
WASHINGTON
NEVADA
ALMA ST.
HIGH ST.
EMERSON ST.
BRYANT
SCOTT
WAVERLEY
COWPER
WEBSTER
BYRON ST.
TASSO ST.
KIPLING ST.
FLORENCE
GILMAN
RAMONA
HOMER
CHANNING
ADDISON
KINGSLEY
MELVILLE
LINCOLN
HAWTHORNE
EVERETT
LYTTON
POE ST.
RUTHVEN
UNIVERSITY
HAMILTON
FOREST
FOREST COURT
ASHBY
HALE ST.
POPE ST.
SENECA ST.
GUINDA
FULTON ST.
FIFE AVE.
BOYCE AVE.
PITMAN
ADDISON AVE.
GREENWOOD AVE.
CENTRAL
WILSON
CEDAR ST.
PINE ST.
HOPKINS
KATHERINE
HARRIE
HARKER SCHOOL
POLO ALTO PARK
PALO ALTO TREE
S.P. STATION
BUS STATION
COMMUNITY CENTER
FEDERAL TELEGRAPH
PUMP STATION
STANFORD CONVALESCENT HOME
MAUSOLEUM
PUMPING STATION
CACTUS GARDENS
MUSEUM
MEDICAL BUILDINGS
CHEMISTRY
POWER HOUSE
ENCINA GYM.
PHYS. ED. BLD.
R.O.T.C. BARRACKS
PAVILION
EATING CLUBS
TOYON HALL
BRANNER HALL
ART GALLERY
LIBRARY
MEMORIAL CHURCH
U.S. DEPT. OF AGRICULTURE EXPERIMENTAL ORCHARD
MANZANITA HALL
SEQUOIA HALL
CHANCELLOR'S RESIDENCE
GOVERNOR'S AVE.
HOMER'S SWIMMING POOL
GYMNASIUM
HOMER'S TRACK
HOMER'S FIELD
KINGSCOTE
ROBLE HALL
BOAT HOUSE
PRESIDENT'S RESIDENCE
BANDSTAND
LATHROP RESIDENCE
TO SEISMOLOGICAL STATION
TO THE RYAN LABORATORY
PALO ALTO
MARIPOSA AVE.
CASTILLEJA
ESCONDITA
MADRONO
PORTOLA AVE.
THIRD ST.
ARK ST.
WILLIAMS ST.
CORNELL ST.
OBERLIN ST.
HARVARD ST.
HANOVER ST.
DARTMOUTH ST.
COLUMBIA ST.
DOWDOIN ST.
AMHERST ST.
PRINCETON ST.
OXFORD AVE.
COLLEGE AVE.
CAMBRIDGE AVE.
CALIFORNIA AVE.
SOUTH COURT
N
E
W